Introduction

Ladies and gentlemen,
Professor Waldenberger,

Thank you very much for inviting me here to the German Institute for Japanese Studies in Tokyo.

I have to admit that, compared with the metropolis of Tokyo, my place of work – Frankfurt – feels like a village, to say nothing of my hometown of Stadthagen west of Hanover in charming Lower Saxony.

Tokyo and Frankfurt, or rather Japan and Germany, are some 10,000 km – a 12-hour flight – apart, and they each have their own distinct culture with many special features. At the same time, our two countries share multiple ties and have a high degree of mutual appreciation. I also have the impression that the Japanese and Germans are not that dissimilar in many respects.
1) The Japanese are known for being very thorough and passionate about order, making them very similar to the Germans or even putting them one step ahead of us.

2) Many Japanese love beer. Just like we do …

3) And the Japanese have an affinity for cash – the same is not just said about the Germans, our payment behaviour studies provide research-based evidence of this.

And yet, payment behaviour is being transformed by digitalisation, which brings me straight to the subject of my speech.

I have been a member of the Executive Board of the Deutsche Bundesbank since September 2018, and have responsibility for payments, amongst other things. My speech is entitled “Curtain up for the future of payments: from bigtechs and fintechs to smartphones and stablecoins”. I would therefore like to proceed by discussing the three aspects mentioned in the title of my speech, since these are key to digitalisation in my area of responsibility – payments – but also in other areas of the financial sector.

I will kick off by discussing the challenges posed by new players in the payments space – I am talking about fintech and bigtech firms.

Second, I will touch upon the changing user and payment habits – the keyword here being smartphones.

Finally, I will wrap up by inevitably talking about what is probably the most discussed payments topic in the world: stablecoins and the challenge called “Libra”.

**FinTechs and BigTechs: new actors in the payments markets**

On many fronts, the digitalisation of payments is being driven by new players – fintech and bigtech firms.

Fintech players – that is, fledgling start-ups offering innovative technology-enabled financial services – also feel very much at home in the payments market. These newcomers start out “on the greenfield” and are able to build their systems from the ground up in a way that lets them leverage the opportunities offered by the platform economy and digitalisation. One example of this is smartphone banks or neobanks such as N26, which is a highly successful newcomer in Germany’s banking market. Another feature of these banks is that they no longer endeavour to “produce” everything themselves. On the contrary, they regard themselves more as digital platforms that seamlessly integrate the services of third parties – including those of other fintech players.
In most cases, though, fintech firms (still) cannot pose a serious challenge to market incumbents. Unsurprisingly, then, we are seeing more and more cooperative ventures between credit institutions and fintech players. These allow the former – the banks – to provide their customers with convenient, innovative services within a short space of time. Examples in Germany include customer identity verification by video, or services that make switching accounts more straightforward. The latter – the fintech businesses – get to tap into a large customer base and benefit from the confidence shown in them and from regulatory expertise, amongst other things. So the end result, more often than not, is a win-win situation for both the incumbents and the newcomers.

By contrast, bigtech firms are a different kettle of fish altogether. These are the global tech businesses and platforms such as Apple, Amazon, Google and Facebook from the United States, as well as Alibaba and Tencent from China.

Bigtech players are transforming the financial sector and particularly the world of payments far more radically than the up-and-coming fintech firms ever could. You see, they can leverage a large existing customer base, technological expertise and sizeable financial resources.

For instance, Apple Pay and Google Pay were launched last year at the point-of-sale in Germany. The dominant force in e-commerce in Germany has, for a long time now, been the US group Amazon – which also offers a payment service of its own. Another US-based payment service – PayPal – is very widespread in e-commerce. Recent figures indicate that roughly 40% of sales by the top 1,000 online retailers in Germany, excluding Amazon, are paid for using PayPal.\[2\]

China offers a very vivid example of how far bigtech services can penetrate people’s day-to-day lives:

WeChat and Alipay (which belongs to the Alibaba Group) can be used not only as a payment method, but also to directly order food, buy cinema tickets or call taxis – all services united on a single platform …

Without a doubt, this is all very convenient for consumers and retailers, since everything can be taken care of “under one roof”, so to speak. This development, however, is not without its problems from the point of view of the consumer, as well as from the perspective of regulators and established banks.
If bigtech firms expand into an increasing number of business areas, there is a risk that monopolies arise. Moreover, if the data generated are analysed and consumers are offered matching products and services, they will lose sight of the alternatives. In the markets of the internet economy, usually “the winner takes it all”.

From the consumer’s perspective, we should remind ourselves of the business logic of many bigtech firms: Many of the services they offer – such as payments – might be provided purely as a way of obtaining data, the key raw material for their business model. Consequently, many services are only seemingly free for consumers, since they are paying for them with their personal data.

For banks, meanwhile, there is the danger of losing the battle for the customer in payments. The risk is that the bigtech players place themselves at the customer interface, leaving the banks merely as interchangeable settlement actors in the background.

For now, the bigtech firms still rely on cooperative ventures with banks for the settlement of payments in Europe. A payment made using Apple Pay or Google Pay is mostly settled via the credit card stored in the account, which is issued by a bank. However, Apple, for one, has already started issuing its own credit cards (currently still in cooperation with Goldman Sachs).

A next step could now be creating closed payment systems that no longer need any established payment instruments to carry out payments. And indeed, Facebook is of course already planning its own payment system which is independent of any bank: Libra – I will come back to this a little bit later …

**Smartphones: changes in user and payment behaviour**

It is not just the newcomers that are disrupting the payments space – consumers’ user behaviour is having a transformational impact, too. The use of cashless payment methods is growing rapidly, as confirmed by our annual payment statistics. For example, the number of cashless payments in the euro area increased by almost 8% [3] last year alone, due, no doubt, in part to the growing trend to go digital.

For now, though, cash reigns supreme as the undisputed number one means of payment for the German general public. They still go delving into their wallets for coins and notes and settle three out of four payments in cash. That is one of the key findings from the payment behaviour study which the Bundesbank conducts every three years, most recently in 2017. German people quite simply like paying in cash.
As mentioned at the start, Japan and Germany are very similar in this respect. Figures vary from one source to the next, of course, but I have read that cash is used in between 62%\[^4\] and 80%\[^5\] of transactions in Japan – and that is not too far off the German figures.

Yet, the picture is also changing in Japan. For instance, your Prime Minister has announced plans to increase the share of cashless payments to around 40% by 2025.\[^6\]

Particularly popular in Germany are proving to be contactless payments using a debit card. Although most of these transactions are still settled in the traditional way with a physical card present, tech-savvy individuals, and frequent and keen smartphone users are increasingly using their phones to pay at the point-of-sale. The topic of mobile payments is gaining more momentum by the day in Germany, and there is little doubt that it will also reduce the use of cash further.

Alongside Google Pay and Apple Pay, the German savings banks and cooperative banks have also launched mobile payment methods of their own, for use primarily in peer-to-peer (P2P) payments and as a digital debit card.

The topic of smartphone payments, then, is being pushed by both bigtech firms and banks. And this is certainly a wise move – after all, smartphones will be more indispensable still among the customers of the future – that is, the younger generation. And precisely for that reason that all providers need to attach particularly high importance to the aspect of security.

**Stablecoins: the challenge of Libra**

Both banks and central banks are following the plans for the “Facebook coin” Libra with great interest.

You may recognize that I prefer not to refer to Libra as a currency, as one can often read in the press. In Germany, as in the euro area, only the euro is legal tender – whereas Libra would be privately issued, of course. That is why I would call it a new means of payment.

Libra is scheduled to be a “stablecoin”. These often peg their value to an existing currency or a currency basket. Furthermore, their value is backed by suitable collateral. In the case of Libra, the money which customers use to buy Libra in exchange for legal tender is invested in bank deposits and short-term government securities. The value of Libra is pegged to the value of the reserve built up in this way.
As central banks, we are generally open to innovation, but the safety and efficiency of payments must be ensured. In fact, a G7 working group recently already reported to the G7 finance ministers on the potential risks of Libra. However, there is still an extensive list of questions which needs to be answered by the Libra Association before final assessments can be made.

Right now, though, there is still not enough known to really assess how safe the Libra vehicle would be and how such a global system could be effectively supervised and by whom. Neither the technology, nor the business model, nor the exact rights and obligations of members and users have been determined. Moreover, there are unanswered questions relating to combatting money laundering.

There are plans for Libra to be issued by an association comprising not only Facebook but also, when it was announced, 27 other enterprises. Though this network appears to be crumbling a little, the financial firepower of those who are still on board and the reach they command with their existing networks would suggest that policymakers as well as central banks and supervisors would be well advised to take these plans very seriously.

From a central bank perspective, I can assure you that we will apply the complete spectrum of existing rules. Depending on how Libra is designed, it may also be necessary to adjust the current regulatory framework. This would then also be a matter for policymakers, because we follow the principle that the same business and same risks need to be supervised according to the same rules.

At the same time, however, the Libra initiative has touched a nerve in today’s payments landscape. By this I am mainly talking about the shortcomings in cross-border payment transactions. Costly and slow, cross-border payments still have not really arrived in the digital era. And worldwide, around 1.7 billion adults remain unbanked. This is another challenge we need to tackle with even greater rigour than hitherto.

Possible answers and conclusions
How do we respond to the challenges presented by digitalisation in payments in general, and in particular to the growing importance of bigtech firms, the Libra project being just one example?

Calls for central bank digital currency have been increasing of late. Various central banks are analysing the opportunities and risks of central bank digital currency for the general public.

China’s central bank has apparently already decided to introduce a digital alternative to
cash soon, even if some of the technical features are still unknown.

In Europe, Sweden is currently investigating various aspects of a potential launch of a digital currency – the e-krona. It would still be a Swedish krona, only in digital form.

One key motivation here, it would appear, is that physical banknotes are gradually disappearing from economic life in Sweden and sometimes are not even accepted in shops any more.

As a member of the Eurosystem, the Bundesbank is following these developments very closely, and we have been investigating what central bank digital currency really could achieve by assessing its opportunities and risks.

A distinction must be made here about what is intended. Should central bank digital currency only be issued to current monetary policy counterparties or to the general public as well? Besides the question of why the introduction and issuance of digital central bank currency is necessary or advisable in the first place, there is also the matter of the possible implications. The main thoughts that spring to mind here are the possible effects on the banking system, financial stability and monetary policy.

Currently, we simply know far too little to be able to single out central bank digital currency as an appropriate answer to the challenges that lie ahead in the payments space.

Consider, for instance, that competition with central bank digital currency might make customer deposits a more expensive source of bank funding and thus continue to squeeze banks’ profitability, with potential implications for bank lending.

Or the concern that the introduction of central bank digital currency for the general public would create a safe store of value, making it easier for people to “flee to safety”. Depending on the concrete design, in times of crisis economic depositors might feel tempted to quickly shift large volumes of deposits into safe central bank digital currency, in a move which would ultimately have the same effect as a bank run and could thus put financial stability in jeopardy.

Furthermore, it is also worth considering how we can improve upon our traditional payments set-up as a way of eliminating the shortcomings in global payments I mentioned earlier on. One idea that springs to mind is that keeping the national payment systems open around the clock might remove some obstacles. And given that innovative instant payment systems are already being set up in many parts of the world – why not think about maybe linking them up or using them for cross-border payments?
At the Bundesbank, we would prefer to see the response to the challenges presented by Libra and bigtech firms come from the private sector. After all, it is clear that there is mounting demand for customer-friendly and widely useable payment services.

That is why there are ongoing deliberations in Europe regarding the creation of a European payment solution.

Financial institutions in Europe – with backing from the central banks – are sketching out ideas for a pan-European payment system that can be used in a wide variety of payment situations – from the point of sale to the online checkout.

After all, one thing holds true in both Japan and Germany: a digital economy needs efficient, quick and competitive digital payment methods. And if one day machines are able to pay autonomously, it is safe to say that they won’t (Tonne) be using cash, payment cards or traditional online banking.

And coming back to the similarities between Japan and Germany I spoke about at the beginning of my speech, the creation of more efficient, safer and user-friendly digital payment methods might further reduce the importance of cash in both Japan and Germany.

That said, I am certain that the passion for beer will probably endure, even in a digital future.

In closing, I now look forward to exchanging ideas with you and to an enjoyable end to the evening here at the German Institute for Japanese Studies.

Thank you for your attention

Footnotes

1. Director of the German Institute for Japanese Studies.

2. EHI, Payment im E-Commerce, April 2019. Extrapolation by the EHI. According to the EHI, the market share including Amazon is 20.5%.


5. Article from The Japan Times dated 29 March 2019: >

6. Article from heise online dated 26 February 2019: >

7. World Bank (2017): Global Findex database. Online: >
   https://globalfindex.worldbank.org/