## Carl-Ludwig Thiele: Citius, altius, fortius – challenges for payments and settlement systems and their analysis

Speech by Mr Carl-Ludwig Thiele, Member of the Executive Board of the Deutsche Bundesbank, at the conference "Economics of Payments VIII" 2016, Eltville am Rhein, 9 November 2016.

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Dear participants of the Economics of Payments conference,

Dear President Weidmann.

Thank you for your welcoming introduction to this conference. On behalf of the Executive Board of the Bundesbank and of the Directorate General Payments and Settlement Systems I too would like to extend a warm welcome to everybody attending this event at our Training and Conference Centre in Eltville.

The Latin phrase "Citius, altius, fortius", which translates as "Faster, higher, stronger", has been the motto of the Olympic Games since 1949. The French Dominican preacher Henri Didon originally coined the term back in 1891 for a youth sports competition, the aim being to motivate his students to give their level best and survive the stress of competing.

This rallying call strikes me as equally prescient today with regard to payments. Market participants' expectations of the availability, speed and security of payment systems are growing at an ever increasing rate.

Users are demanding that payment be made almost immediately, wherever the recipient is in the world and round the clock, all without any hiccups during transmission. Ideally, payees would like to know exactly when they will take receipt of payment so as to be able to use that expected liquidity again in real time.

If we are to fulfil these expectations then it will be necessary to massively expand the requirements that apply regarding the operation, oversight and analysis of payment and settlement systems. The operators of payment and settlement platforms, be they public or private in nature, are now consequently faced with growing challenges.

The payments landscape is currently undergoing a number of significant developments that may prove game-changing. These include the advent of instant payments and the establishment of innovative fintech solutions as well as distributed ledger technology, which is built upon blockchain algorithms.

The Eurosystem is currently examining and enhancing its market infrastructure services by pursuing a range of project initiatives.

On the one hand, following the successful migration of TARGET2 Securities, it is anticipated that the benefits and modern technology offered by this new platform can be put to use for TARGET2 as well.

Moreover, in a second project, the Eurosystem is playing with the idea of providing a new range of services connected with instant payments settlement. This would enable us to support the market in its efforts to implement a pan-European instant payments solution and to reduce the level of credit risk arising from payments thanks to an instant final settlement facility using central bank money – as seen in Australia, for example.

A third project initiative comes in the shape of a range of services dedicated to harmonisation of collateral management for monetary policy counterparties. At present, this activity continues to

be dominated by specific national circumstances and a certain degree of fragmentation along national borders.

All three of these project initiatives were given the go-ahead by the ECB Governing Council in September of this year and are now in the process of being scrutinised.

But the market is also in a state of great flux. For instance, over the past two years, fintechs have gained enormously in importance. Young businesses are increasingly acting as junior partners to established banks, offering customer contact. Start-ups creating innovative solutions for the interface between customer and bank are particularly well placed to reap the benefits in terms of cooperation.

The new EU Payments Directive envisages action to standardise technical interfaces in response to such third-party access to accounts. And this may well pave the way to even greater innovation.

All in all, the world of transaction banking is becoming more complex and the ways in which cooperation occurs more varied. This also presents analysts in payments economics with a challenge. To some extent, payment flows will change on account of technical developments but in part they will do so because of changes in payment behaviour.

For my part, I believe blockchain based technologies will be another major source of change as they offer up the chance of simplifying convoluted intermediation processes entailed in the business of payment and settlement. Virtually all payment service providers are looking at ways to apply these technologies to their payment and securities settlement activities.

In addition to many other uses, they could potentially be integrated into automated procedures (known as "smart contracts"). It is also conceivable that blockchain technology could be used to greatly simplify the laborious task of managing reference data records.

Needless to say, analysts would benefit from the establishment of a reliable worldwide master database, especially if payment behaviour is to be examined over time.

You will note that I have repeatedly spoken of potential in this regard. That is because we are still a long way off finding solutions for live systems that are suitable for mass use. Blockchain technologies still have many hurdles to jump before they can be applied in real life to alleviate large-scale applications. Their biggest problem at present seems to be their all too limited scalability.

Innovation is the driving factor behind growth. However, the practical application of new innovations must not lead to a trade-off between efficiency and security, both of which need to be safeguarded to maintain the architecture of our financial system in the long term. This applies not just to distributed ledger technology and instant payments but also to other innovative fintech solutions.

At this stage in developments it is too early to say much about the implications of blockchain technology. This is partly due to the fact that it is not a simple case of one technology replacing another. What we are dealing with here is a new technology whose actual worth probably lies in its capacity to usher in different processes and structures that are broadly more efficient than those in place today.

The task of analysing financial market structures consists in identifying the potential and the risks associated with the various technologies that are being used and understanding their impact on market participants' behaviour.

In future, ever greater priority will be attached to interconnectedness and appreciation of the "big picture" as it affects the individual market participant as a means of gauging developments and

the risks they entail.

On top of this, a solid understanding of market participants as can be garnered from payment and settlement systems, is also useful outside the confines of the actual systems themselves. That is why the direct access to customers afforded by a current account is of such importance to credit institutions. For it allows them to get to know the customer.

And the same holds true for central bankers. Analyses derived from payment and settlement systems can be of great use in connection with monetary policy, banking supervision and financial stability.

The aim of this conference is to bring central bankers and researchers together with a view to

- discussing changes and challenges in the world of payments
- deepening our understanding of today's payments landscape
- forging ahead with innovations in this field.

Last year, the Bundesbank held its first ever academic conference on the topics of payment and securities settlement. That event was a major success. And we hope to expand on that success with this event.

In making our invitations this year we teamed up with partners from the United States and we are glad to see the excellent response that has been generated.

Ladies and gentlemen, the ball is now in your court to enliven this conference through your input and to use it to your own benefit. The expectations made of economic analysis are at least as high as those made of payment and securities settlement services.

Let us live up to the Olympic motto of "citius, altius, fortius". For my part, I look forward to encountering multiple ingenious analyses and ideas and a lively exchange of information.

Thank you for your attention.