Erkki Liikanen: Cash and the central bank

Opening remarks by Mr Erkki Liikanen, Governor of the Bank of Finland, at the Bank of Finland Conference on Going Cashless, Helsinki, 14 June 2016.

* * *

Dear friends and colleagues,

I want to welcome you all to this conference organized around a very old and at the same time a most timely topic: cash.

Central banks have always thought a lot about cash, of course. But until recently, it was mainly seen as a logistical and security matter. This is changing.

Now, we have to consider the role and the future of cash from more fundamental perspectives.

One perspective is the effect of information technology. Technological change has always shaped banking. Historically we see the impact of such inventions as the telegraph, the credit card, the ATM, and electronic fund transfers. But how about notes and coin?

In essence, cash is a way to store and convey information: information about the purchasing power of the bearer. But cash is not the only possible way to do it. Information technology offers more and more alternatives, many of which compete in today's marketplace.

Technological development has made it possible to offer improved services and to increase efficiency in the payments industry. But the technological imperative is not the only force at play. Commercial incentives are also important. The utilization of the technological possibilities has sometimes been spurred by crises.

Finland is an example of this.

After the Nordic banking crisis in the early 1990s, our banking sector had to go through major cost-cutting and productivity improvements. During the 1970s and 1980s the banks had invested very much in the ICT, which was made possible due to high profitability. In this structural change, Finnish banks profited from these investments in changing their way to operate and they became forerunners in internet-banking. This shows once more how necessity becomes the mother of invention.

Today, Finland and the other Nordic countries are pretty advanced in the electrification of payments, and most people can go about their daily lives perfectly well without touching cash. And many do so. Contactless payment cards are among the new developments which, by their convenience, pose a serious challenge to cash in terms of sheer technical efficiency and timesaving.

By the way, Finland was a pioneer in the use of contactless smart cards for payments. They were first introduced by the mid -1990's in the public transit systems of several Finnish cities like Oulu and Tampere.

Technology is not only about efficiency. Other features of cash are also challenged. Some are quick to claim that new cryptocurrencies such as Bitcoin can now offer users the same anonymity which has long been thought to be the unique quality of cash.

BIS central bankers' speeches 1

It has even been said, that cash, that is, notes and coin, is "on trial", to cite the title of a recent conference. The question we must be prepared to answer is: what is the justification for cash as a means of payment on the face of such developments.

Answering that question could shed important light on some fundamental questions on the nature and role of central banking in general. This is one of the reasons this conference has been arranged.

Another reason for the discussion has recently been the low-interest rate environment which now prevails in much of the developed world. This situation has focused the attention of economists to the so-called zero lower bound of interest rate policy.

The zero lower bound problem results from the availability of cash as a liquid investment alternative, with zero return (minus storage and insurance costs). The alternative constituted by cash makes it difficult, perhaps impossible, to push market rates very far into the negative territory.

Practice is not quite as simple as theory. Recent experience tells us that interest rates can be somewhat negative, even if there are no restrictions on banknote holdings. Holding large amounts of cash is not costless. As a result, the effective lower bound can be soft, and somewhere below zero.

In the proximity of the lower bound, central banks, ECB included, have supplemented their toolkit with forward guidance and with various unconventional measures, such as large-scale asset purchases. These have helped to keep monetary policy effective even in today's exceptional low-interest environment.

The question relevant for today is, is the lower bound for interest rates a serious problem for the efficiency of monetary policy? And if it is, is the problem persistent enough so that we should take radical measures to remove the lower bound?

There are economists, such as Kenneth Rogoff, who think that it would be best to discontinue cash altogether, in order to liberate monetary policy from the lower bound, letting interest rates move more freely to both directions. I think this is not the mainstream view now, however.

The seriousness of the lower bound problem in the future depends partly on what happens to the average level of interest rates. This in turn depends on the return of inflation tendencies in the economy, and the equilibrium level of the real interest rate in the future.

Here we encounter one of the most interesting topics of economic discussion these days: the secular stagnation hypothesis. It has got a lot of attention but has not convinced everybody. The issue is intensely debated by academics.

Many countries were hard hit by the global financial crisis. Recovery has been slow and uneven although it has been taking place. Productivity growth has been slowing down for many years, almost globally.

For the future, we can think of two scenarios. In the first, the deceleration of growth would turn out to be temporary. In that case, the issues raised by the low interest rate environment and the lower bound problem would eventually become less topical. The equilibrium real interest rate would return to more customary levels, and any deflationary tendencies would recede. The average interest rate level would be normalized.

I still inclined to think that scenario to be the likely one.

¹ See http://www.suerf.org/studies/6359/cash-on-trial.

In the second scenario, we would face a permanent and significant slowdown of productivity growth. This would imply that the equilibrium interest rates could be very low for a very long time, perhaps occasionally negative. The central banks would be more likely to hit the lower bound for interest rates more often.

That would be the case in which removing the lower bound for interest rates would be something to think about.

This is clearly a complicated matter:

- The experience with alternative monetary policy measures would have to be assessed: how well can we substitute other monetary policy instruments for interest rate policy if needed?
- The realism of a world with occasionally negative nominal interest rates would have to be considered, not only in money markets, but in retail banking too. The customer resistance to negative nominal rates for their savings could be very stiff. Bank profitability could be a serious issue.
- Finally, the pros and cons of a payment system without cash would have to be examined. What would be lost in terms of convenience, resilience and privacy if cash was discontinued? Should it be replaced with something new?

Before a judgement could be passed regarding the future of cash, all these aspects would need to be carefully considered and balanced.

Currently, the role of banknotes in payments is diminishing, and the role of credit and debit cards is growing. Curiously, the total value of banknotes in circulation has not decreased in most countries, and has even been growing. This is an interesting puzzle which may be one of the results of the very low interest rates prevailing.

Anyway, the infrastructure needed for cash withdrawals has gradually been downsized in some countries. The international differences are large. The Nordic region is leading the way. The number of ATMs has been diminishing for years here. Many bank branches do not handle cash any more. In the emerging situation, at least in Finland and the other Nordic countries, obtaining cash has probably become more time consuming and difficult for customers who prefer to use it.

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.

For most of the population, for most purposes, and for most of the time, this trend is not very problematic. But the payment system is a utility which must be accessible to everybody, not only the majority of people. It must be inclusive. So that raises the issue of how social groups with special needs can cope without the option of using cash.

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?

Another interesting hypothetical question is what should be the role of the central bank in a such an hypothetical economy where physical cash would no longer exist. Should the concept of legal tender be redefined, and should the retail customers have access to central bank money in such an economy?

Different ideas have been floated. Some people think that citizens should be given the option of opening transaction accounts at the central bank. Some have proposed that the central

BIS central bankers' speeches 3

banks could issue circulating digital currency by using the distributed ledger technology, like the Bitcoin does. There have been other ideas, too.

At present, central banks are not trying to actively direct the payment system away from cash, nor trying to promote its use. The commercial forces have been given a leading role, while the central banks have seen to it that legal tender is available when needed. This has worked well so far. But we must think ahead, and clarify our position on these issues, and interaction with researchers and experts is invaluable to help us in that.

I should make a side remark here. As we all know, the Eurosystem will discontinue the production and issuance of \in 500 banknotes. The elimination of the largest-denomination banknote is hoped to have an impact in limiting the underground economy and making all kinds of illegal transactions more difficult. Its use in ordinary transactions has not been large in any case.

Some people have been disappointed by this decision, and interpreted it as a sign that the ECB is taking a more negative view on the future of cash in general. This is a misinterpretation. The decision should not be overdramatized. For a comparison, in the U.S. the \$ 100 bill is the largest banknote. The ECB is not taking a radical step in discontinuing a \in 500 banknote. At the same time the new series of \in 200 and \in 100 notes will be introduced to meet the all the demand. There is no change in our attitude on the future of cash.

To conclude, cash has never been more interesting than now. Increasingly, the central banks and the whole society need analyses which go to the foundations of the monetary and payments system. I trust this conference will make a valuable contribution to this fascinating research area.

I thank you for your attention, and wish you a very productive conference day.