## Yves Mersch: Euro banknotes – a means of payment recognised worldwide

Speech by Mr Yves Mersch, Member of the Executive Board of the European Central Bank, at the Bargeldsymposium of the Deutsche Bundesbank, Frankfurt am Main, 19 May 2014.

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At the end of April 2014 16 billion banknotes with a face value of nearly €1 trillion were in circulation. This represents an increase of about 160% since the end of 2002. The €50 banknote, which is the most important one for payments, accounts for around one-third of the total amount in circulation in terms of value. The €500 banknote accounts for another third. Incidentally, this sharing between the €50 and the €500 corresponds roughly to that of the Deutsche Mark in circulation before the euro cash changeover. The growing use of card readers, increasing interconnections and lastly the advertising campaigns of the banking industry have led to a rapid rise in non-cash payments. However, cash is still popular for making micro-payments: in the euro area, it is used for nearly 90% of all payments under €20.

Many users of euro banknotes are probably not even aware that only a small portion of cash in circulation actually "circulates", i.e. is used for processing payments. We assume that the vast majority of €500 notes serves primarily as a store of value. Also, almost half of the circulating €50 notes are hoarded. Altogether, only one-third of the euro currency in circulation is used for payments in the euro area, while 40% of it is held as a store of value. In the euro area, the low inflation rate and low interest rates favour the hoarding of cash, for the opportunity costs of holding cash are low.

Approximately one-quarter of all euro notes are used outside the euro area – not only as a reliable store of value, but also as an accepted means of payment in international markets. Let me turn now to the international role of the euro.

Our statistics indicate that the net exports of euro banknotes by banks in the euro area amount to around €12 billion per year. This is an average value, because the international demand for euro fluctuates. The first years after its introduction were marked by a conversion of the then national currencies into euro notes. Finally, in 2005 and 2006 some market saturation was observed. Foreign demand, however, in the wake of the global financial crisis, rose and reached its peak in 2008. The insolvency of Lehman Brothers in autumn 2008 and the ensuing loss of confidence in the stability of banks led to unexpectedly large cash withdrawals. Euro banknotes served as a safe haven; the currency's stability was appreciated. In October 2008, about half of the net withdrawals of €35 billion went to regions outside the euro area. To date, there has been no complete reversal of this process. The opposite effect was observed during the debt crises in Greece and Cyprus. Mistrust in the stability of the euro led to falls in international demand for the currency between April 2010 and March 2013. Since then, however, there has been a steady upward trend again. The recent events in the Crimea and in eastern Ukraine, for example, have led to a massive increase in demand for euro banknotes from Russia in recent months.

The statistics probably only show a portion of the euro banknote flows, namely only those that are handled by the banking system. We have reason to believe that the actual net outflow of euro notes is higher. A simple calculation supports this conjecture: overall, the number of euro banknotes in circulation is in fact higher because of the economic variables. The gap between the actual number in circulation and the expected number amounts to €350 billion. This value thus indicates the theoretical maximum value of euro banknotes circulating abroad, while the statistics should show the lower threshold. On average, this results in a value of €250 billion, which is roughly equivalent to one-quarter of the total number of euro banknotes in circulation.

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Since the data collected by the banks statistics say nothing about the regional distribution of demand for euro, we carry out annual discussions with banknote wholesalers. The data obtained in this way show that euro notes are mainly used in countries neighbouring the euro area. Last year well over 70% of all euro banknote sales were made to end customers in other European countries. Switzerland accounted for a substantial proportion of sales and demand was also strong from the UK and Russia. Euro notes flowed back mainly from eastern European countries of the European Union and from the eastern non-EU countries, such as Turkey. Over half of all purchases thus came from eastern Europe.

Over the years, the flows of euro banknotes have remained largely the same. Switzerland has traditionally been a key purchaser, because it, together with Liechtenstein, is completely surrounded by euro area countries. In cross-border trade in goods and services large amounts are often paid in cash. The Swiss, like the Germans, have a preference for cash payments.

The demand for euro notes in the UK can largely be explained by tourism. Many immigrants from the Middle East who live in the UK withdraw large amounts of cash in euro there, which they then spend in the euro area. It's a similar story with Switzerland.

Russia is another important market for euro cash. The euro, like the US dollar, is traditionally used as a stable store of value there. The demand for euro correlates with the euro/dollar exchange rate: the stronger the euro, the greater the demand for it. While particularly in the wake of the financial crisis in 2008 there were stronger outflows of notes going to eastern EU countries, a "dehoarding" of stocks has begun. Every year net return flows have been noted. The return flows from Turkey however result in large part from local tourism. In addition, it is likely that considerable amounts in the pockets of Turkish migrant workers end up in their home country, from where they are repatriated via the banking system.

In some non-euro area countries, Kosovo and Montenegro, euro cash is even legal tender and is therefore regularly used in daily transactions. This unilateral "euroisation", which has not been coordinated with the EU, is to all extents and purposes a euro adoption "through the back door".

This is not compatible with an orderly institutional approach to Europe and the euro. Unlike the euro countries or small states such as San Marino, these countries make no commitments as a *quid pro quo* for introducing the euro.

I would now like to consider the use of euro banknotes in regions outside Europe. Above all, the United Arab Emirates and China are major international transshipment centres for goods. For example, African retailers and consumers make purchases in Dubai. They value the euro as a stable, internationally accepted means of payment. Transactions are settled in cash, because cash has the advantage of settling the invoice immediately, and no information about the creditworthiness of the contracting party needs to be obtained. Around one-third of all return flows of euro banknotes are from Asia and the Middle East. In north, central and south America, the euro tends to play a minor role; the US dollar dominates there.

Demand for euro banknotes is largely linked to how foreign users assess the stability of the euro as a currency against their local currency and the US dollar. The six-monthly surveys of the Oesterreichische Nationalbank in eastern and south-eastern Europe show that confidence in the euro in the eastern EU countries fell steadily between 2007 and 2011. This loss of confidence is also seen in southeast Europe, although it is less pronounced. Since 2012, confidence has grown again; only in the Czech Republic was the view still held last year that the euro is probably not stable or trustworthy in the medium term. When one compares confidence in the euro with confidence in the domestic currency, the euro enjoys, in almost all cases, and even during the debt crises in Greece and Cyprus, more trust than the respective national currency.

The euro is trusted internationally not only because of its stable value. Users of euro banknotes and coins appreciate the very low counterfeit rate. While the number of genuine

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euro banknotes in circulation has almost doubled since the introduction of the single currency, the quantity of counterfeit notes has remained largely unchanged. After an initial period of about one-and-a-half years, the number of counterfeits detected in payment transactions had stabilised at around 50,000-60,000 pieces per month and with some variations the value has been very constant at this level for a good ten years. Annual losses have been stable for years at  $\le 30- \le 40$  million. The "Banknote Recirculation Framework" ensures that no counterfeit notes can enter circulation via automated teller machines (ATMs). All banks and cash-in-transit companies are required, according to an ECB Decision, to reliably authenticate notes received from customers. Only then are they suitable for stocking ATMs.

The most often counterfeited denominations are the €20 and €50, which together account for around 80% of all fakes. In relation to the total volume the proportion of counterfeit euro banknotes thus remains within very moderate limits and is in no way worrying. To maintain that situation, the first series of euro banknotes is gradually being replaced by new notes with improved, up-to-date security features. To ensure broad acceptance of the new notes, various stakeholders were involved during the design phase. Focus group interviews and consultations involving associations of blind and visually impaired people influenced the design and characteristics of the security features. The new series is based on the concept of "evolution not revolution". This means that banknote equipment should be able to authenticate and process the new notes simply via software updates. The early and continuous involvement of banknote equipment manufacturers is particularly important. The conversion of several million devices is a huge logistical challenge. To handle it, it is essential to provide equipment manufacturers with banknotes of the new series in good time. The rather slow conversion of vending machines in the case of the new €5 has shown us that many businesses require an even longer lead time and to be contacted more actively. As a result, eight months before the launch date on 23 September 2014, production samples of the new €10 banknote were made available to equipment manufacturers. A "partnership programme" aims to broaden the impact of the communication activities.

Despite having a modern design and the latest security features, the banknotes of the new series are clearly recognisable as euro notes. This is very important because euro banknotes are the most visible symbol of the common currency area. In order not to disconcert holders of the notes worldwide, the banknotes of the first euro series will remain legal tender for a very long time. And of course the central banks of the Eurosystem will redeem banknotes of the old series at face value for an unlimited period.

Euro banknotes and coins are a method of payment of stable value, acceptance of which is compulsory, and thus they are superior to alternative methods of payment. Of these, I would like to mention two types: virtual money and regional currencies.

Virtual money can, like cash, be used to buy real goods and services. It is "digital cash". Bitcoin is the best-known example. This cross-border virtual payment system was launched privately in 2009 in response to the international financial crisis, offering money that was independent of central banks and commercial banks. Bitcoins are "mined" in a decentralised way in a computer network and managed in the same fashion. Their special feature is that payments are made directly between the participants without a bank as an intermediary. The elimination of any bank charges achieved in this way is often claimed to be an advantage.

However, exchange rate losses can quickly cancel out this advantage. For example, the Bitcoin exchange rate, determined by supply and demand, slumped from €170 to €70 in April 2013 after the Bitcoin exchange temporarily suspended trading and triggered panic selling. Further price falls occurred after hacker attacks, when Bitcoins were stolen on several occasions. This happened most recently in February 2014 and led to the winding-up of Mt. Gox. Since the Bitcoin trading platforms are not regulated, 100% losses are also possible. The absence of a clear legal framework also leads to considerable legal uncertainty among Bitcoin users. Although interested parties can very easily download the application for

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Bitcoin, they neither understand how this payment system works exactly, nor the risks they run when using it. Worldwide, there are probably a maximum of two million Bitcoin users, and only a few thousand businesses and service providers which accept Bitcoins. For that reason, Bitcoins have also been referred to as a "regional currency of the internet".

However, there are also various *physical* regional currencies which are used like cash. With a circulation of 700,000 money vouchers, the "Chiemgauer", as it is called, is probably the largest regional currency in Germany. It is accepted by 900 companies and associations in Upper Bavaria.

The issuance of regional money is intended to strengthen the local economy. The use of this cash is limited to the region in order to artificially keep purchasing power local. In a study published in 2006, the Deutsche Bundesbank aptly remarked that such a deliberately regional closing-off impeded inter-regional trade. And without the latter a region cannot develop. Moreover, this closing-off not only inflicts self-damage, but also harms potential commercial partners, whom you deprive of opportunities to grow. The damage occurs in two ways: firstly, there is no inter-regional division of labour, so comparative cost advantages cannot be exploited. Secondly, integrated markets are larger than the sum of individual regional markets. Many regional currencies have also been designed to be self-liquidating, i.e. that they lose value over time. This loss of value is intended to encourage owners of money to spend it quickly. Hoarding loses its appeal. While the velocity of money in circulation actually increases, the money supply falls because of the relatively high cost of holding money. Thus, a steady stimulus of demand for goods cannot be expected.

Due to the very limited use of virtual and regional currencies they compete neither with the banking sector's payment systems nor with euro banknotes. The examples illustrate the superior characteristics of euro cash: its value is guaranteed by the ECB and the national central banks of the Eurosystem and it can be used throughout the euro area – and beyond – for payments. The payment process requires no infrastructure and settlement takes place in a logical second; the creditworthiness of the contracting party does not play a role.

In the light of the steady growth of euro cash in circulation, it is clear other means of payment are not displacing it, but that, at most, a shift is under way from the payment function to store-of-value function. The euro owes its international role to its reputation as a stable anchor of value. The debt crises of recent years have done little damage to its good reputation. In the event of a lack of trust in the stability of a national currency or in the stability of the banking sector, the euro is a reliable store of value. In pursuing its activities, the Eurosystem will continue to bear in mind the important role of euro cash as an international currency.

See G. Rösl, "Regionalwährungen in Deutschland – Lokale Konkurrenz für den Euro?", published by the Deutsche Bundesbank, 2006.