Keynote speech Dr. Lex Hoogduin ‘Payment innovation in a European landscape’ (DNB), at the DNB-ECB conference: ‘Retail payments: integration and innovation’, hosted by the ECB, Frankfurt, Tuesday 26 May, 2009.

Ladies and gentlemen,
It is a great pleasure to welcome you all on the second day of the joint ECB-DNB conference on retail payments. I hope you all enjoyed yesterday’s program about the integration of the retail payments markets. Today, we will focus on the second theme of this conference: payment innovations. There are three points I would like to make:

1. Payment innovations are important for social welfare,
2. Successful adoption of a payment innovation depends on bringing both buyers and sellers on board, and
3. Payment innovators in Europe: Please join forces!

Let me introduce my first message “payment innovations are important for social welfare” by sharing some of my own payment experiences with you. Last month I bought a car. I paid for it by means of a so-called ‘urgent payment’, using Internet banking from home. With just a few simple mouse clicks I transferred my money to the account of my car dealer. Paying for my very first car was a completely different experience. Back then you had to go to your bank for an urgent payment. The payment was costly, in terms of both time and money. To begin with I had to go to the bank in person. And secondly, the fee was considerable, because it included a clerk’s labour costs. Many car buyers probably opted for cash in order to avoid such a fee, but I preferred the safety of an urgent payment.

This personal experience illustrates some of the social benefits of payment innovations for society: they make life easier and safer for consumers and retailers and they reduce payment costs. In addition, they also enhance economic welfare by stimulating trade. Not only can money be transferred much faster, consumers can also make unplanned purchase decisions using payment cards or effect cross-border purchases using online payment methods.

In general, innovations are one of the key driving forces behind economic growth. During the past decades many economists have studied the relationship between innovation, productivity growth and economic welfare. They have found that productivity growth leads to more economic welfare and that innovation is one of the driving forces behind productivity growth. Estimated elasticities between expenditures on R&D and productivity growth at the firm level indicate that 1% more expenditure on R&D leads to 0.1 to 0.2% additional productivity growth. That sounds like a rather good investment to me.

Investing in innovation in payments also leads to productivity gains. Cost studies, such as those conducted by DNB or the one presented yesterday by Olaf Gresvik for Norway, show that electronic payments are cheaper than paper-based payments. Several years ago, DNB calculated the costs saved by substituting payment cards for cash. The results revealed that the increased use of payment cards reduced the costs of retail payments by 6% between 1990 and 2004.

The development of electronic payment instruments has been driven by several factors, a crucial one being the rapid development of IT in the second half of the 20th century, which paved the way for electronic payment instruments for both point-of-sale payments and remote payments**.** Credit cards and debit cards were introduced for payments in shops, gas stations, hotels and restaurants. Now mobile and contactless payments are starting to take off at points of sale. For regular remote payments, such as rent or utility payments, electronic payment methods were introduced which included direct debits and electronic credit transfers. In the Netherlands, these have quite successfully replaced paper-based payments.

The advent of electronic credit transfers brings me to a second important factor leading to payment innovation, the Internet. The Internet has drastically changed the way consumers and businesses buy, and pay for, goods and services. Within a decade or so, transferring money via Internet banking has become common practice in many countries. Moreover, on-line applications, such as electronic billing, are now a reality in some countries and underway in many others. The Internet has also led to the advent of an entirely new sales channel for sellers, allowing them to sell their goods and services to people all over the world. This new on-line sales channel has stimulated the development of new payment instruments. In the Netherlands, the Internet payment solution iDEAL has provided consumers and web retailers with a safe and user-friendly way of using Internet banking for their on-line purchases in web shops, because consumers are directly linked to the on-line banking website of their own bank. Other countries like Germany and Austria have their own Internet payment solutions. A global Internet payment solution was introduced earlier by Paypal. All these payment innovations have in some way contributed to the social welfare of buyers and sellers. They have led to cost savings, they have brought buyers and sellers more user-friendly payment instruments, they have increased safety and, last but not least, they have stimulated trade.

We don’t know yet whether these most recent innovations will be successful. But let’s look at some past successes to see what made them so attractive in the eyes of both buyers and sellers and try to learn from them. This brings me to my second message: ‘Successful adoption of a payment innovation depends on bringing both buyers and sellers on board’. Several research papers in the conference program deal with adoption issues in payments. They focus on adoption mechanisms in two-sided markets, that is markets with two demand sides, in which both buyers and sellers are required to pay with a particular payment instrument. An important result from this research field is that the use of payment instruments on one side of the market correlates positively with acceptance on the other side. That means that payment instruments should have features which make them attractive to both consumers and retailers. Payment instruments which score well on the following four aspects, namely added value, simplicity, safety and pricing, by comparison to existing payment instruments, stand a good chance of being used on a large scale.

Let's start by looking at the first factor: added value. Internet banking has enabled consumers to make payments or use other banking services from behind a computer anywhere in the world, 24 hours a day, 7 days a week. That is highly convenient, especially for people who lack the time or are unable to visit their bank during regular opening hours. Payment cards are used widely because people no longer need to worry whether they are carrying enough cash to buy what they want. This feature is attractive to both consumers, and retailers.

Secondly, simplicity is one of the keys to a successful adoption. New payment instruments should be easy to obtain, install and use, since most consumers and retailers don't want to spend much time learning how to use them. Nor are they keen to install complicated hardware and software. In this respect, payment service providers could perhaps pay more attention to the needs of small enterprises. In the Netherlands, card acceptance used to be fairly low among small retailers, even when costs went down. Apparently, small retailers found card acceptance too cumbersome, and got lost in the wilderness of offers from banks, telecom companies and terminal suppliers. In order to increase card acceptance, banks, telecom companies and payment service providers have developed 'smart debit card packages', tailored specifically to small retailers. These packages provide low-cost all-in-one solutions, including a contract for a payment terminal, a broadband Internet connection, and often a contract with an acquiring bank as well.

Some consumers may feel insecure about their ability to use a new payment instrument. Take, for instance, the less-educated, the elderly and people with a physical disability. As a central banker, responsible for the accessibility of the payment system, I would like to ask payment innovators to think of these groups of people when developing new payment instruments. This is especially important if, eventually, all consumers and retailers are compelled to use the new payment instrument because banks no longer support the old one. Then it is key that the new payment instrument can be used by every buyer or seller, or in other words, every one of us. Investing time and money to develop a payment instrument that is suitable for everyone is not only preferable from a moral point of view, but from a commercial one as well. Fewer adjustments may be needed afterwards if innovators take the needs of vulnerable groups into account at an early stage of development. The period during which banks and businesses incur double costs for supporting both the legacy and the new payment infrastructure could then be shortened considerably.

Another important adoption issue concerns safety. The adoption of a payment innovation will depend on how buyers and sellers perceive its level of safety compared to existing payment instruments. Therefore, I highly appreciate the investment made by payment innovators and sellers to enhance the safety of payment cards and Internet banking. In the Netherlands, payment card fraud at the point of sale and ATMs has increased in recent years. Retailers have now agreed with banks to switch to the safer EMV payment technology faster than was originally planned. I realise it may be challenging to offer payment instruments that are both safe and easy to use and to strike the right balance between stricter safety measures and user-friendliness. On the one hand, one doesn't wish to scare off buyers and sellers with complicated and costly safety measures. On the other, however, buyers and sellers are sometimes the weakest link in the payment chain and one would like to see them protect themselves more adequately against criminals. It is important that banks continue to invest in safety and in consumer information about safe usage, so that both consumers and retailers can make safe and efficient payment choices.

A final issue I would like to raise concerns payment fees. I know this is a very delicate topic. In order to provide an incentive for both buyers and sellers to use a new payment instrument, banks may need to charge them both user-friendly fees. You may wonder what I mean by user-friendly fees. I believe user-friendly fees should reflect the differences in costs of the different payment instruments for both buyers and sellers. That way, both buyers and sellers will benefit financially from adopting a cost-effective innovation, and both will be stimulated to use it.

Let me elaborate. In general, payment innovations enhance cost efficiency, which implies that the costs of a payment, based on the innovation, are lower than the costs of a payment made through an existing instrument. Pricing payment instruments in a way that reflects differences in costs will ensure that a new payment instrument is attractive to buyers and sellers alike. If the new payment instrument is always the cheapest available to both buyers and sellers, they will both be stimulated to use or accept it any time, and the adoption of the new payment instrument may run smoothly and rapidly.

Research among Dutch consumers and retailers has shown that if Dutch consumers have to pay for a payment instrument, they will often opt for an alternative that is free of charge, even if they appreciate the features of the priced payment instrument more. Moreover, we have found that lowering debit card charges leads to a higher acceptance rate of debit cards, a continuing increase in the number of debit card payments and a higher level of cost efficiency.

It may be challenging for banks to stimulate the adoption of a payment instrument in this way. In retail payments, buyers rarely pay for their payment behaviour; it is the sellers which shoulder the bulk of the costs. So, at first sight, buyers may think they are worse off if they have to start paying for their payments. However, eventually they may actually be better off. Transparent pricing, with the payment innovation representing the cheapest payment instrument, provides both buyers and sellers with incentives to adjust their payment and acceptance behaviour and reduces payment costs for society. In the end, buyers will benefit from these social cost savings through lower consumer prices.

Now that we have discussed the conditions which may determine whether an innovation will be adopted on a large scale or not, I would like to look ahead and think about innovation in the future. My third and last message is addressed to payment innovators active in Europe: Please join forces!

Innovation is a creative process. It can take quite a while before the final specifications of a payment innovation have crystallised. Waiting until every country or bank is ready for innovation may hold up its development for years. This may prove harmful to the innovation, because it may turn out to be past its sell-by date before it is even born. Therefore, I would like to encourage communities with ideas for something new to start developing, to experiment, to learn and to share their experiences with their European counterparts. This can be done in a competitive environment. I would be in favour of having leading players in Europe develop open standards together and welcome other interested players to join this initiative when they are ready. In the Netherlands, three banks took such an approach when developing iDEAL, the Dutch e-payment solution. Other banks joined in at a later stage. iDEAL has become a great success.

I fully support standardisation at the European level. Too many variations in one basic type of payment innovation cannot be efficient and could cause all of them to fail. I realise that developing new payment innovations in a European context will be much more challenging than it used to be in national markets. Payment habits differ considerably among countries.
In some countries, people may be ready for a payment innovation, whereas elsewhere people may actually be quite content with the existing options. In addition, coordinating the development and introduction of an innovation has become much more complex, because of the increased number of parties involved. Despite the complexity, the European Payments Council successfully managed to develop the standards for the SEPA credit transfer and the SEPA direct debit, and to draw up the SEPA cards framework.

The next, and perhaps even bigger, challenge is to work on future European payment solutions such as e-payments and mobile payments. Each country has its own ideas and wishes as to the best specifications for a payment instrument. Finding compromises acceptable to all countries that could form the basis for a European payment solution is challenging and time-consuming. To be honest, this is a reason for concern. But perhaps it is even more of a concern to the banking community itself. Buyers and sellers in Europe may not wait patiently for a European payment solution developed by the banking community. If non-bank payment service providers or global players in payments come up with a suitable payment solution first, this solution might be chosen rather than one developed by the European banking community. Incidentally, this solution may be equally beneficial from a social welfare point of view, provided that sound standards are maintained for safety and reliability.

Public authorities, including central banks support payment innovation. The best way of doing so is by providing a regulatory framework that ensures safety and gives plenty of opportunities for new initiatives.

Ladies and gentlemen,
I am coming to the end of my speech. Payment innovations are highly important. I have much faith in the innovative power of banks, card associations and payment service providers. And I am confident that they, too, will come up with new payment innovations and instruments in the future. Payment innovators, keep in mind that for a successful adoption, you will have to focus on the future needs of both European buyers and sellers. I fully understand that innovating in a European landscape presents quite a challenge. But I trust that we will see new initiatives flourish in our market in the future. I thank you all very much for your attention and I wish you a pleasant and fruitful second conference day.