

# Target 2013: Modernising Payments in Ireland

## Foreword



In November 2007, National Irish Bank issued a pre-Budget submission, urging action to reform Ireland's outdated payments system. We pointed out that the widespread use of cash and cheques was placing an unnecessary cost burden on both households and exporters.

We have now revisited our previous estimates of the cost of Ireland's high usage of cash and cheques. While the economic circumstances today are very different, the central message of this report is unchanged. Ireland's high use of cash and cheques is placing an entirely avoidable cost burden onto households, businesses, banks and the taxpayer of €1bn annually.

The cost of our high use of cash and cheques goes beyond pure financial concerns. Wide scale cash usage helps perpetuate the shadow economy, at a considerable cost to ordinary, compliant taxpayers. Further, the security challenges of transporting large volumes of cash are needlessly putting the lives of bank, retail and security staff at risk. The cheque is at the heart of the late payment culture, which is causing huge difficulties for Irish SMEs. We must consign the 'cheque is in the post' culture to the dustbin.

In response to our 2007 submission, the Government reduced the charge on combined debit/ATM cards from €20 to €5 and transferred this tax onto cheques. This has had some effect, with 600,000 more debit cards now in circulation, while the number of cheques has fallen by one-fifth. However, other countries have been taking more concerted action. For example, in 2008 the UK committed to the abolition of cheques by 2018.

To transform Ireland's payments culture bolder steps are required. We believe that Ireland should announce an 'E-Day' after which our payments culture would be transformed. We have set out a series of measures which, if implemented, would reduce cheque usage by 95% and bring Ireland's cash usage below the European average.

As a country, we face considerable challenges over the next few years. The Government has already set out its vision for a 'Smart Economy'. The area of payments is a classic case where modern technology can be used to give a better service which costs less, is safer, and causes less environmental damage. I urge the Government, banks, industry and the general public to work together to achieve this goal.

Andrew Healy  
Chief Executive, National Irish Bank

# Executive Summary

Ireland's payments system – the means by which we pay for goods and services and transfer wealth – remains dominated by cash and cheques, which are very expensive, slow and environmentally damaging.

Ireland is the most intensive cash user in Europe. Cash withdrawals per person are almost twice the European average, which is driven mostly by the number of withdrawals, though the larger average size of withdrawal is also an important contributory factor. Irish people withdrew over €25 billion in cash from ATMs in 2009.

Ireland is the second most extensive user of cheques in the EU, after France, with Irish people writing 102 million cheques in 2009. In value terms, cheques in Ireland amounted to one-tenth of the value of all cheques written in Europe in 2008.

This reliance on paper based payments has a number of high costs for our society. Annual savings of around €1 billion could be made in switching from these paper-based systems to electronic systems. This is equivalent to around €680 per household. However there are many other non-financial costs to high cash and cheque usage:

- **Late Payments:** There is a very strong correlation between the extent of cheque usage in a country and the time it takes for firms to receive payment for invoices.
- **Environmental Damage:** Paying utility bills by cheque for a year has the same carbon footprint as paying a lifetime of utility bills by Direct Debit.
- **Shadow Economy:** There is a strong negative correlation between the prevalence of electronic payments in a country and the size of its shadow economy.
- **Security:** A high usage of cash payments imposes significant security risks. So-called “tiger kidnappings” are much more common in cash-intensive societies.

National Irish Bank believes Ireland should develop an ambitious programme of reform to change our payments habits.

## Target 1: A 'Cheque-less' Ireland: Reduce cheque-use by 95% by 2013.

Vulnerable sectors of society should be allowed to continue using the payment mechanism that suits them most.

## Target 2: A 'Less-cash' Ireland: Reduce cash usage to below the EU average by 2013.

This target recognises that the concept of a “cash-less” society is highly unrealistic.

**The following recommendations, if enacted, would meet these targets:**

### *Recommendation 1:*

#### *Announce an 'E-Day' for October 2012*

It is more efficient to have a transformation away from cheques in a relatively short space of time, through an 'E-Day' in October 2012. This leaves over two years to explain to consumers the changes that are going to take place, and what they have to do in response.

### *Recommendation 2:*

#### *Establish a 'Payments Transition Board'*

A 'Payments Transition Board' should be established containing regulators, banks, consumer groups and businesses. This board should co-ordinate the communications programme in advance of the E-Day and identify measures to protect vulnerable individuals and groups.

### *Recommendation 3:*

#### *Taxation should be switched away from debit cards*

Currently, debit card users have to pay €5 for a combined debit / ATM card. This charge should be abolished to encourage people to take up debit cards. To replace the tax revenue foregone, the Government could increase the charge per cheque to cover the full social cost of cheques. Vulnerable people and groups should be exempted from this charge entirely.

*Recommendation 4:*

*State agencies should stop issuing or accepting cheques*

The Government should adopt the principle of innovative procurement to its consumption of payment services. All arms of Government should stop issuing or accepting cheques by October 2012, though vulnerable individuals and groups should be exempted from this.

*Recommendation 5:*

*Try and influence people to reduce cash withdrawals*

Banks and retailers should develop a detailed plan to encourage people to reduce their cash usage. Banks should explore the potential for products that can replace cash as a form of payment. A single ATM network should be created, with a public service obligation charter to ensure an adequate distribution of ATMs throughout the country.

*Recommendation 6:*

*Require all taxis to accept card payment by 2013*

While card payment in taxis is common in many European countries, it is generally not available in Ireland. This forces people to carry cash and causes unnecessary danger for taxi-drivers who have to retain large cash holdings.

*Recommendation 7:*

*Abolish the Cheque Card Guarantee Scheme.*

The cheque card guarantee scheme was established when cheques were the only alternative to cash for point-of-sale transactions, though few retailers still accept cheques. Ireland should abolish the Cheque Card Guarantee Scheme by E-Day.

# 1. Payments in a Modern Economy

Payments are a crucial feature of all modern economies. The term encapsulates any transfer of wealth, whether made by or to individuals or businesses. A payment is usually made to buy a good or service or to fulfil a legal obligation. The most widely used forms of payment are notes and coins, cheques, credit and debit cards, direct debits and other electronic transfers.

The pace of change in payments increased significantly in the second half of the twentieth century. Prior to that, innovation had been slow. The use of gold and silver as a means of payment dates back almost three millennia, while notes were first put into use in China over 1,000 years ago. Forms of payment that resemble cheques have a similar vintage, though the modern cheque can more directly be traced back to the seventeenth century. In 1717, the Bank of England pioneered the first use of the pre-printed cheque.

The payments industry started to change radically after the Second World War, and alternatives to paper-based payments started to emerge. In the 1950s the Diners Club card became the first credit card in general use. During the 1960s, cash dispensers were introduced into Ireland for the first time, increasing people's access to cash. In more recent years, debit cards have grown in popularity, with the Laser card scheme first being introduced in 1996.

In other countries, other forms of electronic payments have been developing rapidly in the last twenty five years. For example, PC banking has been available in Finland since the mid-1980s. By 2008, electronic payments (credit transfers, direct debits or card payments) were almost three times as frequent in Finland as in Ireland.

Finland's success was partially an historical accident, as the legacy paper-based system the Finns had been using required the payer to know the account details of the person receiving the payment. As such, converting to an electronic transfer from a PC initiated by the

customer was relatively straight-forward. Cheques, by contrast, do not contain the payee's account information, which may in part explain their persistence. However other countries which had had wide-scale cheque usage, such as Denmark, have adapted rapidly to new forms of electronic banking.

For internationally trading companies, the cost of Ireland's paper-based payments system is going to become even more apparent. Banks across Europe are currently implementing SEPA (Single Euro Payments Area), whose aim is to make paying in Europe easier. Businesses will soon be able to set up direct debits for clients in Maastricht as easily as if they were in Monaghan. So while a Finnish exporter will have one electronic-based system to make and receive payments, their Irish equivalent will have the expense of two systems. Many local transactions will still be cheque-based, while overseas transactions will be electronic.

Today, most modern economies use a wide variety of payment mechanisms, depending on the circumstances of the payment. There are broadly three circumstances in which payments are made:

- **Point of sale:**  
i.e. A business or place where a product or service can be purchased, usually a check-out counter in a shop. In most modern economies, two competing technologies dominate this form of payment, namely; cash and cards. Mobile payments are increasing, though they remain small, while very few retailers still accept cheques. On-line payments are almost exclusively through card payments.

Cash retains a central role in point-of-sale payments. There are a number of reasons which explain its continued popularity – it is universal, trusted and anonymous. Further, recent studies show that cash remains the most effective mechanism for low-value payments under €10 in value, though debit cards are more efficient for higher value payments<sup>1</sup>.

<sup>1</sup> See Bergman, Guibourg and Segendorf (2007) "The Costs of Paying - Private and Social Costs of Cash and Card Payments" who estimate a breakeven point of €7.80, while they cite Brits and Winder (2005) who estimate a break-even point of €11.63, and Ten Raa and Shestalova (2004) who estimate €13.

# Retail Payments Modes

## Non-Price Characteristics for Consumers and Merchants

	Advantages	Disadvantages
<b>Cash</b> 	<ul style="list-style-type: none"> <li>Universally accepted and trusted, only form of legal tender</li> <li>No transaction limit</li> <li>Quick transaction time</li> <li>Anonymous</li> </ul>	<ul style="list-style-type: none"> <li>Security risk (personal and for merchant)</li> <li>Risk of counterfeit money</li> <li>Susceptible to ATM failure</li> <li>Merchant must count, balance, store and lodge cash, and maintain a float</li> </ul>
<b>Cheques</b> 	<ul style="list-style-type: none"> <li>No transaction limit</li> <li>Customers feel they have greater control</li> <li>Generally accepted for regular payments</li> </ul>	<ul style="list-style-type: none"> <li>Risk of default</li> <li>Effort / cost of postage etc</li> <li>Uncertainty of when money is transferred</li> <li>Merchant must count, balance, store and lodge cheques</li> </ul>
<b>Card Payment</b> 	<ul style="list-style-type: none"> <li>Secure</li> <li>Very widely accepted</li> <li>Interest-free credit period (cred. cards)</li> <li>Main payment form on internet</li> <li>Cash-back facility (debit cards)</li> </ul>	<ul style="list-style-type: none"> <li>Minimum/maximum transaction size often imposed</li> <li>Retailer must pay a fee for each transaction</li> <li>Slow transaction time</li> </ul>
<b>Direct Debit</b> 	<ul style="list-style-type: none"> <li>Secure</li> <li>Very widely available</li> <li>Creates accounting paper-trail</li> <li>No effort required after initial set-up</li> </ul>	<ul style="list-style-type: none"> <li>Feeling that consumers are "not in control"</li> <li>Initial effort required for set-up</li> </ul>

New technologies for point-of-sale are emerging, though card and cash payments still dominate. Mobile phone technology could become the basis for making many payments in the 2010s, provided that it is supported by good security and data content standards<sup>2</sup>. This technology could allow person-to-person payments to be made more easily by electronic means and, as a result, could reduce the use of cash in that area.

- Regular payments:**  
Regular payments are payments such as electricity bills or tax returns, which are usually for the on-going

provision of a good or service, or the discharging of a debt. The principle competing forms for such payments are cheques and electronic payments (e.g. direct debit). Other forms have reduced dramatically, but are still used (for example, cash may be used to pay a child's sports fee or piano lessons). The cost of cheques to the economy is very high.

- Wholesale payments:**  
These are very large value transactions between financial and non-financial firms, which are almost always electronic in nature.

<sup>2</sup> Leinonen H. (2008), "Payment habits and trends in the changing e-landscape 2010+", Suomen Pankki Expository Studies A:111.

## 2. Ireland's Payments Usage

Ireland's payment usage has been changing in recent years, though at a slower pace relative to many of our peers. This section analyses Ireland's use of various payment mechanisms compared to the EU average, and to Scandinavian societies in particular.

### 2.1 Cash

Ireland is a very intensive user of cash, as measured by ATM withdrawals<sup>3</sup>. While Ireland does not have a lot of ATMs per capita, they are used very frequently, and for relatively large amounts.

#### ATM Usage: Ireland vs. EU

2008	# ATM Terminals (per million)	# Withdrawals (per terminal)	Average Withdrawal value (€)	Annual Cash Withdrawals per person (€)
Ireland	766	59500	142	6468
EU	855	34700	110	3264
Ireland as a % of EU	90%	171%	129%	198%

Source: ECB

There are a number of salient features of Ireland's use of ATMs:

#### 1. ATM Terminals:

The number of ATM terminals here is low by international standards. There are 766 terminals per million people in Ireland, compared to 855 in the EU, and 978 in the Eurozone. This is particularly notable for a country like Ireland with a relatively large dispersed rural population. The scope for reducing ATM terminals appears to be very limited.

#### 2. Average Annual Withdrawal:

On average, the cash withdrawal per capita in Ireland in 2008 was €6,468, compared to an EU average of €3,264. Cash withdrawal per terminal in Ireland in 2008 was €8.4m, compared to an EU average of €3.8m.

#### 3. Number/value of withdrawals:

Each terminal in Ireland has 59,500 withdrawals, significantly above the EU average (34,700). The average withdrawal amount in Ireland was also higher, at €142, compared to €110 in the EU.

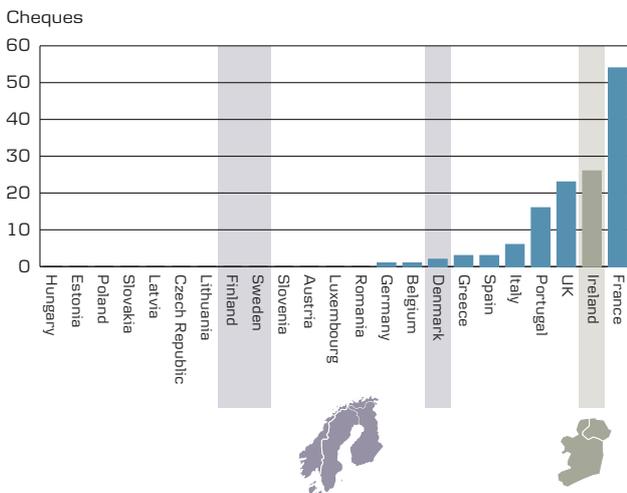
In conclusion, Ireland does not have a big ATM network, though they are used comparatively far more frequently and the average withdrawal is large. Cash withdrawal per person is almost twice the European average, which is driven mostly by the number of withdrawals, though the larger average size of withdrawal is also an important contributory factor.

<sup>3</sup> Statistics on the number of ATMs and their usage are the only measure of cash usage for which internationally comparable statistics are readily available and updated. ATMs are believed to account for a large majority of all cash issued every year. Other important sources of cash include in-branch withdrawals, the post office network, credit unions and retailers through the debit card 'cash-back' facility.

## 2.2 Cheques

Ireland is the second most extensive user of cheques in the EU, after France. In all, 117 million cheques were written in Ireland in 2008, for both personal and business uses. This fell to just over 100m in 2009, though a lot of this fall is thought to be related to the general fall in consumer spending due to the recession<sup>4</sup>. The usage in 2008 equates to 26 per person.

In value terms, cheques in Ireland amount to 430% of GDP, or €797 billion. This is one-tenth of the value of all cheques written in Europe, despite the fact that Ireland accounts for less than 1.5% of EU GDP. In most other European countries cheques are the exception and are usually restricted to very specific demographic sectors or payment types.

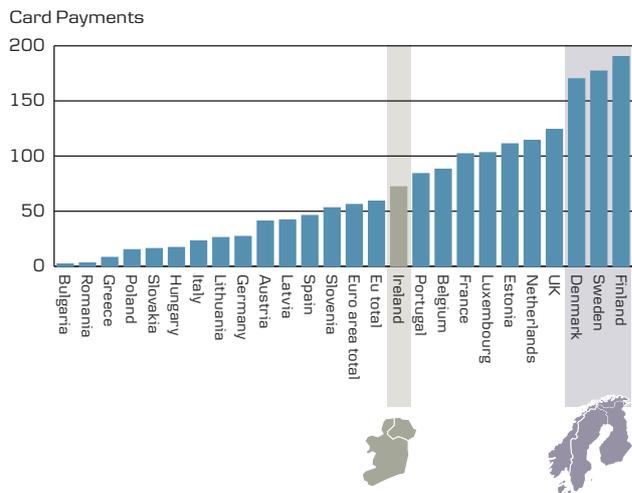


Cheques per capita, 2008. Source ECB

## 2.3 Card Payments

Ireland's use of debit and credit cards is around in line with the EU average. The popularity of card payments in Ireland has increased significantly in recent years on the back of the increased take-up of debit cards. In 2003, six out of every ten card transactions were with credit cards. In 2006 debit cards surpassed credit cards in terms of the number of transactions and by 2009 accounted for 200m transactions annually - twice as many as credit cards.

The use of cards has been facilitated in recent years by an increase in the number of card-readers capable of accepting payments. Ireland had 74,000 such terminals in 2008, up from 53,000 in 2006. Cards are now very widely accepted, although are still not widely used in some industries, notably transport.

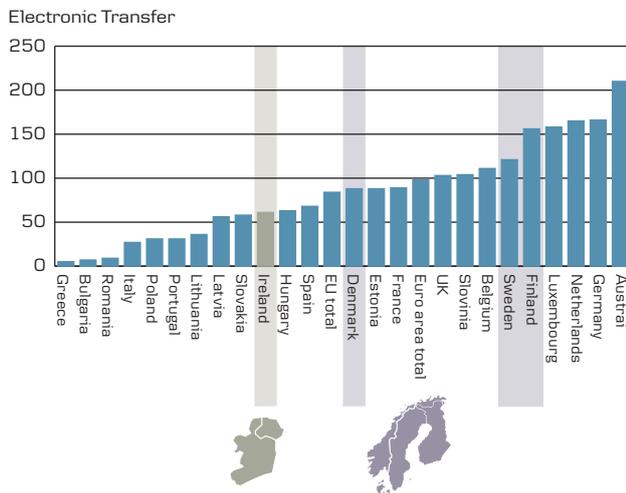


Card payments per capita, 2008. Source ECB

<sup>4</sup> In this document most of the data refers to 2008 as this is the latest date for which comparable international data has been published by the ECB.

## 2.4 Electronic Transfer

Ireland's use of debit debits and credit transfers is low by European standards. In a survey of consumer habits in 2006, only around one-third of regular payments were made by direct debit. For gas bills, direct debits accounted for less than one-in-four bill payments, with cheques and cash being the dominant payment types. This relatively modest penetration rate for electronic payments is despite the fact that they have been heavily marketed by utility firms, notably the ESB, since the 1980s.



Transactions per capita, 2008. Source ECB

## 2.5 Emerging Payments Methods

The pace of change in payment practices has speeded up in recent years. There are many nascent technologies emerging which currently account for only a very small share of total payments. While electronic methods are expected to entirely replace paper transactions in the coming years, great uncertainty remains as to the extent to which electronic cashless media can replace cash.

There is a wide-spread view in the payments industry that mobile payments will become a dominant form of making payments in the future. Not only are mobiles a ubiquitous, highly popular technology, they can potentially be used to make a wide range of payments, including point of sale, regular payments and person-to-person payments.

An important innovation in this regard is the near-field communication chip, which can be embedded in mobile phones and used to transfer value when placed near a reading device. This 'contactless' technology could prove particularly useful for small-value purchases where lower denomination banknotes and coins are currently used. In June 2010 Nokia announced that all their new smart-phones would come with Near Field Communication technology from 2011

Many countries are currently rolling out contactless terminal readers for card payments, and these readers will also be capable of executing mobile payments. Some payments experts regard contactless cards as a bridging mechanism between cards and mobiles.

Mobile payments are already gaining a strong foothold in a number of developing countries, most notably in Kenya. The M-PESA service there enables its users to deposit and withdraw money, transfer money to other users and non-users and to pay bills. M-PESA was first launched by Vodafone in March 2007 and grew rapidly, capturing 6.5 million subscribers by May 2009 with 2 million daily transactions.

## 3 Costs of High Cash and Cheque Usage

There are a number of costs to high cash and cheque usage, namely the financial cost, the environmental cost, the security cost and the cost to small businesses of late payments. Each of these is discussed below.

### 3.1 Financial Cost

There are a number of studies which estimate the cost of various payment mechanisms. These studies agree on the following broad conclusions:

- Different payment instruments are optimal in different circumstances.
- Cash is optimal for small transactions, while debit cards are optimal for larger transactions.
- Cheques are almost always more expensive than their electronic alternatives.

However, these studies report very different estimates of the resource cost of payments in GDP terms. For example, the most widely quoted study of the US<sup>5</sup> estimates that 3% of GDP is used in payments, although recent Scandinavian estimates suggest a figure of less than 0.5%. While some of this difference in the estimated importance of the payments industry relates to methodology, a significant portion can be explained by differences in payment behaviour, which payment instruments are included and whose costs are included.

There are a number of studies which try to estimate the societal cost of cash. Of the cash-centric countries for which studies have been done, Austria, the Netherlands and Belgium show that the cost of cash to society amounts to 0.47%, 0.48% and 0.58% of GDP respectively (with data for 2005, 2002 and 2003). These estimates do not include the cost to consumers of cash. These countries used on average less than half the cash per unit of economic activity<sup>6</sup> than Ireland did in 2008, so the cost of cash in Ireland would be expected

to be much larger. Extrapolating this cost and adding consumer costs gives an estimate of the cost of cash usage in Ireland of 1.38% of GNP in 2008<sup>7</sup>.

There are few studies available that measure the social cost of cheques. Cheque usage is virtually non-existent in most European countries, so the European studies that have been conducted generally ignore their cost. The UK Payments Council recently estimated a combined cost for banks and business in excess of £2 per cheque (approx €2.50). They have now initiated a full cost-benefit analysis of cheques to verify this estimate. Including the cost of postage and time for households, this could rise to around €3-€4 per cheque in Ireland. This is in line with the \$4.37 (€3.50) cost per cheque estimated in the US study [\$2.97 based on 1994 prices]. This would suggest that cheques in Ireland cost approximately 0.27% of GNP during 2008.

Combining the two numbers gives an estimate of the cost of cash and cheques of around 1.65% of GNP. This is not the total cost of payments in Ireland, which includes the cost of card payment and electronic transfers, which would take the total cost of the payments system to close to 2% of GNP.

There are various estimates of the savings of switching from these paper-based systems to electronic systems, which range from one-third to two-thirds. This suggests that around 0.8% of GNP could be saved by a programme of reducing cash usage to the European average, and reducing cheque usage dramatically. This is equivalent to a saving in excess of €1bn per annum by reforming Ireland's payment habits, or €680 per household.

<sup>5</sup> Humphrey, Pullery and Vesala, "The Check's in the Mail: Why the United States Lags in the Adoption of Cost-Saving Electronic Payments", *Journal of Financial Services Research*, 17:1, 17-39, 2000.

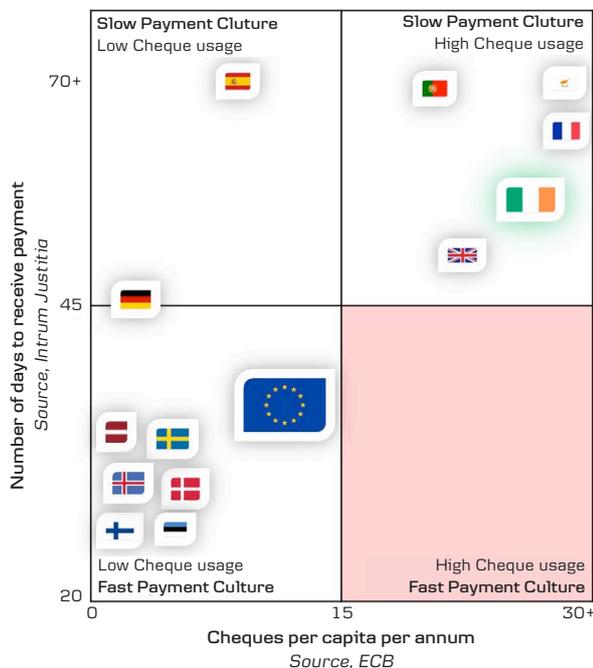
<sup>6</sup> Measured as GDP in these three countries, GNP in Ireland.

<sup>7</sup> This assumes that the marginal and average costs of cash-handling are the same. This is a plausible approximation, given the success that many Scandinavian societies have had in reducing the cost of cash (Norway 0.15% of GDP and Finland 0.12%). It also assumes that household costs of cash represent 20% of total costs, taken from Gresvik and Haare (2009) "Costs in the Norwegian payment system 2007".

### 3.2 Late Payments

Firms in Ireland face a relatively long wait by European standards before receiving payment for the goods and services they have provided. On average, Irish firms have to wait over 50 days for each payment to be received, over twice as long as in Finland. This makes it more difficult for businesses to manage their cash-flow, and makes them more reliant on other forms of financing such as overdrafts.

There is a very strong correlation between the extent of cheque usage in a country and the time it takes for firms to receive payment for invoices. There is no example of any European country that has a fast payments culture and also having high cheque usage. Further, businesses in every one of the high cheque-using countries take significantly longer than non-cheque countries to receive payment.



<sup>8</sup> Assuming the utility bill is bi-monthly.

<sup>9</sup> <http://www.independent.ie/business/irish/the-black-economy-is-back-in-business-1917172.html>.

<sup>10</sup> Humphery, Kaloudis and Owre (2000), "Forecasting Cash Use in Legal and Illegal Activities", Norges Bank Arbeidsnotat 2000/14. A subsequent study revised this downward somewhat, though their revised estimate was still consistent with illegal use accounting for more than a half of all cash in circulation.

### 3.3 Environmental Damage

The carbon footprint of each direct debit is just 0.76g CO<sub>2</sub> per payment, compared to 49.3g CO<sub>2</sub> for every cheque. In other words, paying utility bills by cheque for a year has the same carbon footprint of paying a lifetime of utility bills by Direct Debit<sup>8</sup>. This is not surprising given the requirement to print a cheque and envelope, the fuel and other emissions from physically transporting it through the post and the various accounting systems that many firms have for dealing with cheques (e.g. photocopying each cheque).

### 3.4 Shadow Economy

All modern societies have significant illegal 'shadow economies'. This refers to both legal activities where taxes are not withheld and paid, and illegal activities such as drug dealing and prostitution. There is a strong negative correlation between the prevalence of electronic payments in a country and the size of its shadow economy. Clearly, it is cash-based transactions which offer the greatest opportunity for participation in the shadow economy.

The cost that it has on the rest of the economy is immense. It has been estimated that the shadow economy represents 14% of Irish GDP, costing the Exchequer €6bn annually<sup>9</sup>. This is money which has to be paid by compliant households and businesses. Ireland's weakened fiscal position provides a compelling incentive to fight cash circulating in the shadow economy.

In societies where cash usage at point of sale has decreased significantly, the extent of its use for illegal purposes is becoming more evident. A Norwegian study in 2000 estimated that the share of cash used for illegal purposes was 67% of currency in circulation<sup>10</sup>. Cash usage has also been studied in Sweden using the same method, with unexplained cash usage amounting

to 45%-65% of all currency in circulation in 1999. This 'unexplained' portion includes legal person-to-person payments that are impossible to track, though the role of illegal payments, such as tax evasion or in the drug trade, is thought to dominate. Finally, a study by the Finnish Central Bank<sup>11</sup> estimated that 'unexplained' cash usage was between 28% and 47% of cash in circulation in 2000.

The other notable feature of the Scandinavian experience was that, despite the fact that electronic card payments were very widely available by 2000, the portion of high denomination notes in circulation remained higher than 50%. This points to the role that high-denomination notes in particular have for criminality. In the UK for example, from May 2010 the €500 note has no longer been made available, given the belief by the UK Serious Organized Crime Agency that the main demand for this euro note comes from organised criminals. In South Korea the authorities incentivised tax-compliance by introducing a tax relief for 20% of credit card payments. This has resulted in a huge increase in card payments.

### **3.5 Security**

The preference of Irish people for cash payments imposes not only a personal risk on them in carrying around money, but also on the network of support services that is required to facilitate a high volume of cash usage. Most notably, so-called "tiger kidnappings" are rare in most European countries, though are much more common in cash-intensive societies. In 2007, Ireland saw the most frequent number of attacks on cash-in-transit vans of any European country.

<sup>11</sup> Paunonen, H., and Jyrkonen, H., (2002) "Cash Usage in Finland - How Much Can be Explained?". Bank of Finland Discussion Papers, 2002 Number 10.

## 4 Rationale for Intervention

For many goods and services, external intervention to influence a market is unnecessary and unwise. In these markets, the free operation of competition between rival producers can achieve high productivity and low prices. However, the characteristics of some markets require external intervention to ensure that competition can operate effectively. For example, regulators exist in a number of industries such as energy, telecommunications and transport, the aim of which is to ensure that competition can benefit the consumer.

The payments industry has a number of features which justify an intervention. In particular, like energy and telecommunications, payments are a network good. However, unlike these two, it is relatively price insensitive, which is likely to slow the rate of modernisation within the industry. Further, the Government is a very large consumer of payment services, so a failure to modernise Government payments is likely to frustrate the modernisation of the industry as a whole. These factors are now discussed in more detail.

### 4.1 Payment Services are a Network Good

Payment services, whether in the form of cash, cheques or some other form, are a prime example of 'Network Goods'. These goods depend for their effectiveness upon the number of other people who use them. For example, having a telephone is ineffective if no-one else in society has one, as there is simply nobody to call. Similarly, cheques are ineffective as a means of making transactions if nobody else in society will accept them in return for goods or services. The corollary of this is also true - a payments mechanism, such as cheques, can retain a dominant role in a society simply because it is in widespread usage and acceptance, even if it is an inefficient, expensive technology.

For example, a businessman may want to adopt an efficient form of banking such as eBanking as a means of reducing costs. However he is in a 'network' of suppliers

and customers, many of whom want to continue to pay in cheques, or expect payment in cheques. The businessman may invest in training staff in eBanking, yet have to continue using cheques for a significant number of his contacts. This is not the case for normal goods or services. For example, if a cheaper and better quality photocopier came on the market a businessman could buy it, even if nobody else in society followed suit.

### 4.2 Payment Services are jointly consumed

Payment services are not consumed for their own sake, but as a way of obtaining other goods and services. A customer's preference for how to make a payment is secondary to the central decision as to whether to buy a particular good or not. As a result, unfavoured and expensive payment mechanisms can survive even if there are superior technologies available.

For example, suppose a shop which accepts debit cards is selling U2 concert tickets, while a second shop which only accepts cash is selling concert tickets for Greenday. In that case, fans of Greenday will use cash, regardless of their preference for debit cards. As such, consumer preferences may not necessarily drive change in the way payments are provided, in the same way that would happen in other markets.

### 4.3 The State is a large consumer of money

The State sector, whether central Government, local authorities, semi-states or other agencies, is the single most important consumer of goods and services in the economy. Given the massive scale of public procurement, there has been increasing emphasis on how the Government can be a demanding consumer of modern goods and services. This can both aid the Government in terms of improving public sector efficiency, but can also provide fertile ground for innovative companies to develop. This can in turn help firms develop products and services that can ultimately be exported.

The Government established the Procurement Innovation Group in July 2008 to raise awareness of the benefits of using public procurement to stimulate research and innovation; identify obstacles in the current procurement process; and identify policies that could create an environment in which the potential for innovation in public procurement can be realised. Their report highlighted that the annual public procurement spend is approximately €10bn on goods and services.

Payment services are also heavily used by the State, though are not always subject to a formal procurement process. State bodies make a multitude of both retail and wholesale payments, whether relating to tax returns, social welfare payments or the payment for goods and services. However the cost to the State and wider economy of paper-based payment systems is very substantial. A move to more efficient payments would increase public sector efficiency, as well as encouraging the development of much more efficient payment practices in the private sector. It could also have the additional spin-off benefit of cultivating the development of Irish firms in the financial payments sector to export abroad.

## 5. Protecting the Vulnerable

There are a number of sections of society where making the transition to a modern payments system would be very difficult, cause distress, or for whom adequate alternatives do not yet exist. For this reason, National Irish Bank does not believe that cheques should be entirely abolished by 2013. A study in the UK identified the following groups that may have difficulty in transferring away from cheques:

- **The elderly:**  
There are a number of reasons why reducing cheque usage among the elderly might be difficult. Most obviously, elderly people often have a lifetime habit of using cheques and may not use or have access to computers. Individuals who live in care homes or for whom mobility is very limited may also find using other payment mechanisms difficult.
- **Carers:**  
Carers and guardians often find cheques easier, as much of the payments can be completed by them, only requiring the payee to sign the cheque. This can be useful where a person has difficulty writing legibly, or when a person has a learning disability.
- **Prison:**  
People serving a custodial prison sentence currently may not have an alternative to cheques;
- **People with Degenerative Illnesses:**  
Cheques are used as a default payment method during the onset of a degenerative condition, when previously used alternatives are found to become difficult to use.

- **Clubs:**  
For some clubs and neighbourhood associations, cheque usage is still dominant. This can be useful where dual-signatories are required for payment authorisation, for example.

The recommendations set out in Section 6 are constructed, where possible, to ensure that these groups can continue to use whichever payment mechanism that best suits them.

## 6. Recommendations

Ireland is currently a laggard in adopting the most modern, cost effective and environmentally sustainable banking technologies though it could become a world leader. Ireland's population is one of the youngest in Europe, with a median age that is seven years less than the rest of the EU. Educational attainment levels among young Irish people are among the highest in Europe, while Ireland is the home to some of the most dynamic and exciting technology companies.

National Irish Bank believes that the following recommendations, if implemented in full, could establish the ground-work for transforming Ireland into a world leader in payments. The immediate policy targets would be:

**Target 1: A 'Cheque-less' Ireland: Reduce cheque-use by 95% by 2013.**

A reduction in Irish cheque usage by 95% would require the transition of businesses and most private homes away from cheques by 2013. The remainder (5%) is to ensure that vulnerable sectors of society, such as the elderly, are able to continue using the payment mechanism that most suits them most.

**Target 2: A 'Less-cash' Ireland: Reduce cash Usage to below the EU average by 2013.**

A reduction in cash usage to below the European average by 2013, which will require a reduction of around 50%-60% on 2009 levels. This target recognises that cash is likely to retain a very important role in Ireland for the foreseeable future, and that the concept of a 'cash-less' society is highly unrealistic.

*Recommendation 1:*

*Announce an 'E-Day' for October 2012*

Given the nature of payments as a network good, it is more efficient to have a transformation in a relatively short space of time, though with sufficient lead-in time to allow consumers and businesses time to prepare. To that end, National Irish Bank urges the Government to introduce an 'E-Day' in October 2012, after which the following reforms would be put into place. This leaves over two years for the Government, banks, retail industry and other stakeholders to introduce a wide-scale strategy to explain to consumers the changes that are going to take place, and what they have to do in response. October is a relatively quiet period for payments, so is an optimal time for making such a transition.

*Recommendation 2:*

*Establish a 'Payments Transition Board'*

A 'Payments Transition Board' should be established, modelled on the Euro Changeover Board which was established in 2002. It should contain representatives of the Financial Regulator, the Central Bank, retail commercial banks, IPSO, retailers, consumer groups, State agencies and the largest cheque issuing/receiving companies. This board should:

- Co-ordinate a wide-spread communications and information programme, to be launched at least six months in advance of E-Day, setting out the alternatives to cash and cheque usage and the details of the switching process away from cheques;
- Identify categories of vulnerable individuals and groups such as pensioners, prisoners, carers, charities, clubs and people with disabilities, and ensure that measures are put in place to ensure that they are protected.
- Identify legislative or other impediments to the development and take-up of new payment technologies.

*Recommendation 3:*

*Taxation should be switched away from debit cards, onto cheques.*

Currently, debit card users have to pay €5 for a combined debit / ATM card. This charge should be abolished to encourage people to take-up debit cards. To replace the tax revenue foregone, the Government could increase the charge per cheque to cover the full social cost of cheques (€3 to €4), with the charge to be equally paid by the payer and payee. This charging of the full social cost of cheques should only be done from October 2012. This charge already exists in limited form, with a 50c charge for the payer, and no charge for the payee. Vulnerable people and groups, such as the elderly, should be exempted from this charge entirely.

*Recommendation 4:*

*State agencies should stop issuing or accepting cheques.*

The Government should adopt the principle of innovative procurement to its consumption of payment services. All arms of Government should stop issuing or accepting cheques by October 2012. This includes all tax receipts and refunds paid to the Revenue Commissioners, all local authority payments, utility bills paid to semi-state providers, and payments by the Government for the provision of goods and services. Not only would this have a very large direct effect of reducing the number of cheques in circulation, it would also have a large demonstrative effect on the private sector. State agencies should operate a register for vulnerable people and groups who should retain the option of paying and receiving payment by cheque.

*Recommendation 5:*

*Try and influence people to reduce cash withdrawals*

ATMs are the main means for many consumers to access cash. This money is the personal wealth of consumers and households, and every effort should be made to ensure that consumers have access to that money in whatever form they want. However recent studies in behavioural economics suggest a number of

steps that can encourage the greater use of debit cards and other forms of payment for transactions greater than €10.

ATMs are currently run on a competitive basis, with individual banks running separate networks. This discourages new banks from entering the market as establishing and running an ATM network is very expensive. It also results in a duplication of ATMs in some areas, and a lack of ATMs in others. Establishing a single ATM network, such as in Finland, would allow for a rationalisation of ATMs, in particular by removing ATMs that are currently the greatest security risk. This ATM network should be subject to a public service obligation charter. This could ensure that, for example, all towns of a particular size are guaranteed an ATM.

The banking industry, in conjunction with retailers, should develop a detailed plan to reduce people's cash usage including:

- Banks should change default ATM choices.
- Banks should introduce extra screens informing customers making large withdrawals of the alternatives to cash.
- Retailers should introduce loyalty card bonuses for customers who pay by card.
- Retailers should introduce 'card only' queues in shops.
- Banks should explore the potential for new innovations and products that can replace cash as a form of payment.
- A single ATM network should be created, with a public service obligation charter to ensure an adequate distribution of ATMs throughout the country.

*Recommendation 6:*

*Require all taxis to accept card payment by 2013.*

The number of card reading terminals<sup>12</sup> per capita in Ireland is close to the European average. However there remain a number of industries where the ability of consumers to use cards is still low or non-existent, notably transport. There is progress being made in this area however. For example, in 2011 an integrated ticketing system for public transport in the Greater Dublin Area is being introduced based on smart card technology. However while card payment in taxis is common in many European countries, it is generally not available in Ireland. This forces people to carry cash and causes unnecessary danger for taxi-drivers who have to retain large cash holdings.

*Recommendation 7:*

*Abolish the Cheque Card Guarantee Scheme.*

The cheque card guarantee scheme was established when cheques were the only alternative to cash for point-of-sale transactions. However very few retailers still accept cheques, and the UK cheque guarantee scheme is being phased out by June 2011. Ireland should follow suit, and abolish the Cheque Card Guarantee Scheme by E-Day.

<sup>12</sup> For credit and debit cards.