Banknotes, local currencies and central bank objectives

By Mona Naqvi and James Southgate of the Bank's Notes Division. (1)

- A few towns and cities in the United Kingdom have set up local currency schemes to promote local sustainability. The schemes issue paper instruments with some similar design features to banknotes. This article explains how these instruments differ from banknotes.
- The size, structure and backing arrangements of existing schemes mean that local currencies are
 unlikely to pose a risk to the Bank's monetary and financial stability objectives. Nonetheless,
 consumers should be aware that local currency instruments do not benefit from the same level of
 consumer protection as banknotes.

Overview

The Bank of England's issuance of banknotes feeds into its monetary stability objective, which includes maintaining confidence in the physical currency. This requires people to be confident that the banknotes they hold will continue to be widely accepted at face value. The promise by the Bank of England to make good the value of its banknotes for all time, as well as its use of robust security features and a wide-ranging programme of education on how to identify genuine banknotes, helps to ensure that this objective is met.

Banknotes are, however, just one form of payment instrument used alongside other physical media of exchange, such as cheques or retail vouchers. A few UK towns and cities have set up their own local currencies, issuing physical instruments that are akin to vouchers, although some are designed to look similar to banknotes.

Local currency schemes aim to boost spending within the local community and, in particular, among locally owned businesses. In addition, there may be other grounds for companies to participate, such as promotion in the scheme's marketing material. Participation by both businesses and consumers might also reduce environmental footprints as well as signal a commitment to supporting the local community.

The Bank of England takes an interest in schemes that have the potential to impact its monetary and financial stability objectives. A number of mitigants exist which, if implemented by current and future local currency schemes, should mean that they do not pose a material risk to the Bank's objectives, as outlined in the **summary table**.

Summary table Features of local currency schemes that mitigate potential risks to the Bank's objectives

Objective of the Bank	Potential risk to that objective	Feature(s) of local currencies that can reduce that risk
Price stability	Local currency schemes lead to significant and unanticipated impacts on aggregate economic activity.	The schemes are small relative to aggregate spending in the economy.
Confidence in the physical currency	Fears surrounding the authenticity of local currency vouchers spill over to reduce confidence in banknotes.	Design features and marketing material help users to recognise that local currency paper instruments are like vouchers and not banknotes.
Financial stability	The failure of a local currency scheme destabilises the financial system as a whole.	The schemes are small relative to aggregate spending in the economy and the one-for-one backing assets are securely ring-fenced.

Given that the schemes currently operating in the United Kingdom are at present small (both individually and in aggregate) relative to aggregate spending in the economy, and are typically backed one-for-one with sterling, they are unlikely to present a risk to the Bank's monetary or financial stability objectives. Nevertheless, a risk could arise if consumers mistakenly associate local currencies with banknotes. Such a perception could generate a spillover effect if, for example, a successful counterfeit attack on a local currency were to reduce confidence in banknotes or, in the event of failure, if consumers were to incorrectly expect recompense from the Bank. Bearers of local currency vouchers do not benefit from the same level of consumer protection as banknotes issued by either the Bank of England or the authorised commercial issuing banks in Scotland and Northern Ireland.

Introduction

The Bank of England started issuing banknotes shortly after its incorporation in 1694, and since 1921 has been the monopoly issuer of banknotes in England and Wales. Today the note issue function forms part of the Bank's monetary stability objective, which includes the aim of maintaining confidence in the physical currency.

The United Kingdom is in an almost unique position in that the government also permits certain commercial banks to issue banknotes. There are three such issuers in Scotland and four in Northern Ireland (S&NI). Legislation was introduced in 2009 to ensure that, in the event of a commercial bank becoming insolvent, S&NI noteholders would be able to redeem their notes at face value.

In addition, there are many other physical media of exchange available for transactions. One example is retail vouchers, which have existed for many years but have a more restricted purpose and use than banknotes. More recently, 'local currencies' have been established in a few UK towns and cities. These are in many ways an evolution of previous alternative currency experiments. Although the current UK schemes are small relative to the issuance of banknotes, the Bank takes an interest in the development of local currencies that have the potential to impact its ability to meet its monetary and financial stability objectives.

This article outlines the key differences between banknotes and local currency instruments. The first section reviews the history of and rationale for central banks having a monopoly over banknote issuance. The second section explores the history of alternative currencies and the aims of UK schemes issuing physical instruments today. The third section examines whether current local currency schemes pose a risk to the Bank's monetary and financial stability objectives. Finally, the article considers user protection, and highlights that consumers have no recompense from the Bank of England in the event of a local currency scheme failure. A short video explains some of the key topics covered in this article.(1)

Central bank money

This section briefly reviews the origins and rationale behind central bank money. To do this, it is useful to consider the three key functions of money, which are to act as a:

- (i) **Medium of exchange** with which to make payments.
- (ii) Store of value with which to transfer 'purchasing power' (the ability to buy goods and services) from today to some future date.
- (iii) **Unit of account** with which to measure the value of any particular item that is for sale.

The evolution of fiat money

In its role as a medium of exchange and a store of value, money can essentially be thought of as a claim (or 'IOU') from one person to another. Historically, societies tended to adopt commodities such as gold and silver as the dominant means of transferring claims from person to person (as a medium of exchange) or from one point in time to a later date (as a store of value).(2) In the 16th century, goldsmiths began to accept gold and silver deposits, in return issuing receipts to acknowledge the debt. Before long, depositors found it easier to simply use the receipts themselves as a means of payment, as they effectively represented a claim on the commodities in the custody of the goldsmiths. Consequently, the enforcement of claims on the reserves became less and less frequent. Goldsmiths were then able to lend out a proportion of their deposits (and earn a profit by charging interest), given that depositors were unlikely to withdraw all of their coins at the same time.(3)

Throughout the 17th century, the British state borrowed from the goldsmiths to fund a series of wars with France. However, the loans came with very high interest rates that led to repeated defaults by the state. The Bank of England was established in 1694 to provide the state with a cheaper source of credit. Like the goldsmiths' receipts, Bank of England notes circulated as a means of exchange since they promised to pay the bearer the sum of the note on demand. That is, anyone holding a banknote could, in principle, have it exchanged at the Bank of England for the designated value of gold.

Over time, the number of banknote issuers declined. The Bank Charter Act 1844 prohibited banks which did not already issue notes from starting to do so. It also prevented existing note-issuing banks in England and Wales (other than the Bank of England) from increasing the value of their note issue. The Bank of England eventually became the monopoly note-issuer in England and Wales after the last private banknotes were issued by the Somerset bank, Fox, Fowler and Co. in 1921. The authorised banks of Scotland and Ireland were, however, still permitted to issue banknotes.⁽⁴⁾

Meanwhile, a period of financial upheaval in the late 18th century drained the Bank's bullion reserves to the point where it was forced to stop paying out gold for its notes until 1821, during what became known as the 'Restriction Period'.⁽⁵⁾ The link to gold was broken again with the onset of the First World War and briefly resurfaced in the form of the gold standard (fixing the value of sterling to gold) in the inter-war period. However, following further financial upheaval, the

⁽¹⁾ See www.youtube.com/watch?v=JrlSag_tkLo.

⁽²⁾ Such commodities were often used because of properties such as their divisibility, homogeneity and portability to facilitate the transfer of claims, rather than because of any strong desire to own the commodities themselves.

⁽³⁾ See Ryan-Collins et al (2011).

⁽⁴⁾ See Byatt (1994).

⁽⁵⁾ See, for example, the section on 'The original 1797 Gillray cartoon' in Keyworth (2013).

United Kingdom abandoned the gold standard and adopted a fiat currency (that is, money by government decree) in 1931. From this point on, the Bank of England's note issue has been backed by the promise of government-guaranteed assets instead of gold or any other such commodity. (1) The rationale and some of the implications of this are discussed briefly below.

Central bank monopoly on the issuance of banknotes

In the vast majority of countries, the central bank is the monopoly supplier of banknotes. Understanding the unique nature of the demand for banknotes is key to understanding the evolution of states or central banks having a monopoly on their supply. The demand for money is quite different from the demand for other goods and services, owing to its functions as a means of exchange and a store of value. For both of these uses, there is a benefit to society if users can be confident that any banknote held will be widely accepted by others in the future, and at its face value.

Users can be most confident in the value of banknotes when there is (and users believe there will continue to be) an asset explicitly 'backing' these notes over the period for which they wish to hold them. In a world of fiat money (which is not exchangeable for a physical asset such as gold), the best way to ensure that notes retain their face value over time is to back them with an asset of the state. Ultimately, fiat money is backed by trust in the state or — more concretely — confidence in the state's willingness and ability to use future taxation to meet all of its obligations.

In addition to arguments in favour of a state-owned monopoly issuer, there are reasons why the central bank, specifically, is best suited to managing banknote issuance. Note issuance requires operational capabilities such as making large-value payments and balance sheet management, which typically form part of a central bank's wholesale government banking function. There is also an operational benefit of co-ordinating liquidity management as a tool of monetary policy with the issuance and return of banknotes.

As banknotes cost less to produce than they are worth, there is an incentive for criminals to counterfeit notes. However, the issuer will only back (and thus provide value for) genuine notes. Users must therefore be able to authenticate banknotes when accepting them. To ensure genuine notes can be distinguished from counterfeits, the issuer must incorporate easy-to-recognise but hard-to-copy security features, as well as provide education to make people aware of how to authenticate them.⁽²⁾

As mentioned at the start of this article, the UK government also permits certain commercial banks to issue banknotes in Scotland and Northern Ireland. The boxes on S&NI banknotes and legal tender (pages 4 and 5) provide more information on this.

Alternatives to banknotes

This section looks at alternative currency schemes issuing paper instruments in the context of a central bank monopoly over banknote issuance.⁽³⁾ The first part explores the historical development of the schemes. The second part assesses the economic rationale for modern-day local currency schemes. Lastly, it outlines the key characteristics of some initiatives currently operating in the United Kingdom.

The history of alternative currency schemes

Throughout history there have been a great number of different schemes offering private media of exchange. The intended purpose of these schemes has varied markedly, ranging from meeting local credit demand and stimulating the economy, to achieving social and political reform. A few examples are outlined below.

In 1832, the social reformer, Robert Owen, concerned about the worsening living conditions of the working class during the Industrial Revolution, implemented two 'national equitable labour exchanges' in London and Birmingham. These introduced a system of 'labour notes' to pay workers in terms of the number of hours they spent to create units of production. The idea was that workers' remuneration would more accurately reflect the value of the product of their labour and hence distribute wealth more equitably to the working class. Despite initial success, the scheme lasted just two years owing to organisational failures.⁽⁴⁾

Around 80 years later, the economist Silvio Gesell, influenced by the Argentinian depression of 1890, advanced the idea of using 'accelerated money' to encourage spending and thus boost demand. (5) His idea was to introduce paper instruments that are subject to periodic and scheduled depreciations in monetary value, through a process known as 'demurrage'. To maintain a note's face value, users would have to purchase and affix a stamp costing the equivalent loss in value onto the note. To avoid bearing the cost of the depreciation, Gesell claimed users would be encouraged to spend money rather than hoard it — somewhat akin to a game of monetary 'hot potato'. (6)

⁽¹⁾ Note that there is still some debate as to which came first out of fiat money and commodity money — see, for example, Kiyotaki and Moore (2001) or Ryan-Collins at al (2011)

⁽²⁾ The Bank is always looking for the best new security features to incorporate into its banknotes. For information on current security features and education materials, see www.bankofengland.co.uk/banknotes/Pages/educational.aspx.

⁽³⁾ The focus of this article is on local currency schemes issuing paper instruments in the United Kingdom. It does not seek to cover e-money or other types of alternative currency such as Bitcoin.

⁽⁴⁾ See Blanc (2006).

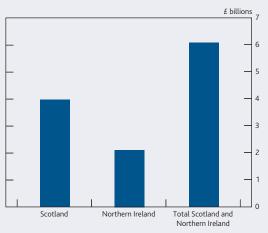
⁽⁵⁾ This rests on Fisher's (1911) Quantity Theory of Money: MV = PT; where money (M), multiplied by its velocity of circulation (V), equals the volume of transactions (T) at the prevailing price level (P). This implies that if the velocity of money circulation increases for a fixed money supply and price level, then economic activity should increase by the same amount.

⁽⁶⁾ See Gesell (1916).

Scottish and Northern Ireland banknotes

There are three commercial banks authorised to issue banknotes in Scotland and four in Northern Ireland.⁽¹⁾ These banks (or their predecessors) have been regulated with regard to the backing of their banknotes since 1845. **Chart A** shows the value of S&NI banknotes in circulation by region, which is small compared to the £54.2 billion of Bank of England notes in circulation.⁽²⁾

Chart A Value of S&NI notes in circulation by location of issuer^(a)



(a) As at 28 February 2013.

Historically, commercially issued notes in Scotland and Northern Ireland did not benefit from having explicitly ring-fenced backing assets or guaranteed central bank settlement at all times. In theory, this should prompt holders

A key example of this form of accelerated money took place in Wörgl, Austria, in 1932. The town's mayor introduced a system of stamped currency called 'labour notes', which depreciated by 1% in nominal value every month unless users affixed stamps to maintain it. The initial effect was an increase in the pace at which the currency exchanged hands (money circulation) before being hoarded or saved for later use. (1) However, the scheme's success was short-lived as the experiment was terminated by the Austrian central bank in 1933. (2)

During the US Great Depression of the 1930s, a number of private currency initiatives issued paper instruments known as 'scrip'. These initiatives were a response to cash shortages following a host of bank runs and failures. Some schemes made use of Gesell's concept of demurrage and required users to affix a two-cent stamp onto the instruments every week to keep the value of the notes current. Although the issuance of scrip was widespread across the United States, the schemes were typically met with limited success due to narrow acceptability of scrip as a means of payment.⁽³⁾

of these notes to assess the future ability of the issuer to make payment in central bank money (or some other commodity of enduring value) and discount the face value of notes as appropriate.

Part VI of the Banking Act 2009 introduced a requirement for the authorised commercial issuing banks to fully back their note issuance with ring-fenced, risk-free backing assets. The backing assets can take the form of Bank of England banknotes, UK coin, or funds held in ring-fenced accounts at the Bank of England. This gives commercial banknote holders a similar level of credit protection to Bank of England noteholders. The primary objective of the legislation is noteholder protection and the Bank of England is responsible solely for this aspect.

In the event of an authorised bank entering an insolvency process — as defined in the Scottish and Northern Ireland Banknote Regulations 2009 — the backing assets will continue to be ring-fenced for at least one year for the sole purpose of reimbursing noteholders through a Note Exchange Programme.

The Act makes no provision for regulating the design of the authorised banks' banknotes or their robustness against counterfeiting. The Association of Commercial Banknote Issuers offers education on the designs and security features of the seven commercial issuers.⁽³⁾

- (1) These are: AIB Group (UK), Bank of Ireland (UK), Bank of Scotland, Clydesdale Bank, Northern Bank, The Royal Bank of Scotland and Ulster Bank.
- (2) As at 28 February 2013.
- (3) See www.acbi.org.uk/current_banknotes.php.

The rationale for local currency schemes

Today, most alternative currency schemes that issue paper instruments take the form of local currencies, which may be used to purchase goods and services from participating retailers within a particular area. Local currencies are established to support local sustainability by incentivising spending at, and between, participants of the scheme. The idea is that a greater proportion of consumer spending and retailers' supply chains are kept within the specified geographical area, improving local sustainability. To achieve this, there is typically a charge or restriction on converting the instruments back into sterling. As such, local currency bearers (ultimately local businesses, once the vouchers have been spent by consumers) face a cost akin to an import tax if they purchase supplies in sterling from non-participants rather than using the local currency vouchers they are holding to buy supplies from participants. There are, therefore, financial

(3) See Champ (2008)

⁽¹⁾ Kennedy (1995) estimates that the velocity of circulation increased 22 times compared to the Austrian schilling.

⁽²⁾ See Blanc (2006)

What is 'legal tender'?

The phrase 'legal tender' is a widely used expression and is a common misnomer. The only banknotes to have legal tender status in England and Wales are those issued by the Bank of England. There are no banknotes issued by commercial banks in Scotland and Northern Ireland that have legal tender status. However, legal tender status has only a very narrow meaning in relation to the settlement of a debt. The term 'legal tender' simply means that if a debtor pays in legal tender the exact amount they owe under the terms of a contract, and the contract does not specify another means of payment, the debtor has a good defence in law if he or she is subsequently sued for non-payment of the debt. In ordinary day-to-day transactions, the term 'legal tender' has very little practical application, as whether or not an instrument (be it a banknote or local currency voucher) is used as a means of payment is subject only to the mutual agreement of the parties to the transaction.(1)

(1) See the Currency and Bank Notes Act 1954 for more information.

incentives to source supplies from (other) local businesses which could create a so-called 'local multiplier' effect.(1)

There could also be costs to participating in local currency schemes, however. Local businesses might be concerned that if they receive a significant quantity of local currency, the restriction on converting it back to sterling limits them to purchasing supplies from (potentially more expensive) local businesses; this may force them to raise prices, making them less competitive relative to non-participants. Indeed, if businesses and consumers used local currency vouchers only to support the existing, economically 'efficient' volume of local trade between suppliers, the schemes' ability to divert trade to within the local economy would be limited.

Local currency schemes often provide businesses with other incentives for participation. For example, participating firms may benefit from inclusion in the marketing material of the scheme, which can help increase demand for their goods and services. Furthermore, both consumers and businesses might also see a benefit to localising consumption and production patterns. This could reduce the energy required for transportation and therefore the economy's overall environmental impact,(2) or generate other potential or perceived social benefits. Indeed, if non-local goods are cheaper because market prices do not fully factor in the additional costs that they impose on society over locally produced goods — for instance, higher carbon emissions as a result of increased transportation — then local currencies may improve welfare.(3) In the language of economic theory, a welfare improvement would arise when the social benefit of reducing the environmental impact (by diverting trade away

from non-local products) exceeds any additional private cost from buying potentially more expensive local products.

Participation by businesses and consumers also signals a commitment to spending in the local community. Local currency vouchers may help people satisfy a latent desire to support the local economy and overcome a potential bias towards purchasing non-local goods, perhaps owing to cheaper prices or consumer choice 'stickiness'. Just as voluntary savings schemes like pensions restrict a person's choices today so as to maximise their lifetime utility, it could be that local currency schemes offer an efficient form of pre-commitment to individuals that wish to increase how much they spend at local businesses.⁽⁴⁾

UK local currency schemes

As noted in the section on central bank money, only the Bank of England is permitted to issue banknotes in England and Wales under the Bank Charter Act 1844. The Banking Act 2009 prevented any banks from issuing private banknotes in Scotland and Northern Ireland other than the seven already-established commercial banknote issuers. UK local currency schemes issue paper instruments with a similar legal status to vouchers. Some schemes design the vouchers with some similarities to banknotes (see Figure 1), although their design must differ from Bank of England and S&NI banknotes to avoid breaching the Forgery and Counterfeiting Act 1981.

Figure 1 Some current UK local currency vouchers



The legal status of a voucher is different from that of a banknote, as vouchers represent a pre-payment for goods or services from a specified supplier (or group of suppliers) and do not legally entitle the holder with the right to redeem the voucher. While the legal status of local currency vouchers is similar to traditional single-retailer vouchers and multi-retailer

⁽¹⁾ See DeMeulenaere (1998) and Krohn and Snyder (2008).

⁽²⁾ See Sanders (2011).

⁽³⁾ Excessive carbon emissions are an example of a negative externality, in which the market choices of individuals lead to undesirable societal consequences.

⁽⁴⁾ For a more detailed explanation of this type of pre-commitment strategy, see Schelling (1984) and Gul and Pesendorfer (2001).

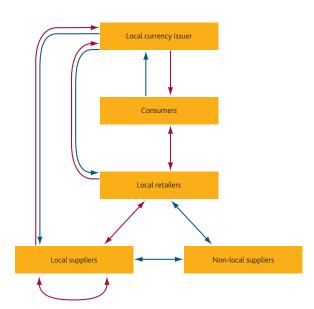
vouchers, such as book or theatre tokens, local currency vouchers offer a different user proposition. They may be used to purchase any good or service from participating retailers within a particular area, and can be recirculated by the retailer to purchase supplies (or given out as change items). While local currencies may have more functions than a traditional retail voucher, they do not have the full functionality of a banknote.

Figure 2 gives an illustrative example of how local currency vouchers might circulate compared to Bank of England or S&NI banknotes. For simplicity, not all possible flows of banknotes are shown and consumers are assumed to acquire local currency from the scheme issuer in exchange for sterling,(1) while the entitlement to convert local currencies back into sterling is assumed to be limited to participating businesses (retailers and suppliers). As indicated by the red arrows in Figure 2, consumers use local currency vouchers to purchase goods and services from local retailers that participate in the scheme. These retailers are then incentivised, through one or more of the features outlined below, to continue to circulate the vouchers either when giving out change to customers or by purchasing resources from local rather than non-local suppliers. Any such substitution in trade towards local businesses should boost the local economy via a local multiplier effect.

Figure 2 Illustrative example of local currency circulation

Flow of banknotes

Flow of local currency vouchers



Current UK schemes typically adopt certain structural features to encourage local spending. For example, a number of schemes issue vouchers that are only redeemable for sterling by retailers (as opposed to consumers) signed up to the scheme, and for a 3% or 5% redemption fee in the case of the

Bristol Pound and Stroud Pound schemes, respectively. The Stroud Pound scheme additionally uses Gesell's concept of demurrage to facilitate increased local spending, as the vouchers depreciate in nominal value by 3% every six months. Some schemes also issue vouchers that carry an expiry date, including, for example, both the Lewes Pound and Bristol Pound schemes.

Table A shows the size of some UK local currency schemes compared to both Bank of England and S&NI banknotes. Earlier schemes issued paper vouchers that were typically limited to a small area. However, the Bristol Pound, which was launched in 2012, targets a wider metropolitan area, although the scheme still has a small value in circulation relative to Bank of England notes. The value of UK local currencies in circulation is also small relative to the commercial banknote issuance of Scotland and Northern Ireland, as even the smallest S&NI issuer has over £300 million of banknotes in circulation.

Table A Scale of some UK local currency schemes(a)

Paper instrument	Value in circulation ^(b)	Population of area ^(c)
BoE notes	£54.2 billion	63.7 million
S&NI notes	£6 billion	7.1 million
Bristol Pound	£250,000	1 million
Brixton Pound	£100,000	300,000
Lewes Pound	£20,000	17,000
Totnes Pound	£8,000	15,000
Stroud Pound	£7,000	13,000

Sources: Bank of England, local currency scheme websites, ONS and Bank calculations.

- (a) Bank of England (labelled 'BoE' above) and S&NI banknotes are included for comparison with local currency schemes.
- (b) Latest available figures for local currency scheme issuance; Bank of England and S&NI note issuance as at 28 February 2013.
- issuance as at 28 February 2013.

 (c) The top two rows report mid-2012 ONS estimates for the United Kingdom and for Scotland and Northern Ireland combined. For local currencies, figures are based on 2011 ONS estimates for the relevant county/borough/parish, and scheme websites. For the Bristol Pound, the scheme reports usage across the former county of Avon.

Importantly, current schemes in the United Kingdom generally back the local currency vouchers one-for-one with sterling. This helps to mitigate the potential risks that the schemes could otherwise pose to financial stability (see the section on the impact on financial stability below). However, the backing assets for local currencies are not legally ring-fenced, which means that users do not benefit from the equivalent level of consumer protection offered to banknote holders (see the section on the impact on user protection below).

It is also worth noting that some schemes go beyond just issuing paper vouchers. For example, the Bristol Pound offers a facility for electronic payments between designated accounts held at the supporting Bristol Credit Union (BCU)

⁽¹⁾ In practice, this might be done via retailers. Moreover, retailers themselves may exchange cash for vouchers to support the scheme.

using internet or mobile phone technology. The involvement of a financial institution such as the BCU marks a significant step in the organisation of UK local currency schemes, made possible by legislative reform allowing credit unions to accept business members for the first time.⁽¹⁾

Relevance to the Bank's monetary and financial stability objectives

This section considers the relevance of local currency schemes to the Bank's monetary and financial stability objectives, including the need to maintain confidence in the physical currency. As illustrated by Table A, current UK local currency schemes are small (both individually and in aggregate) in relation to the issuance of banknotes. This means that they should not pose any significant risk to the Bank's objective of monetary stability. For financial stability, the small sizes of the schemes and the one-for-one backing with sterling should mitigate the potential risk, insofar as the backing arrangements are recognised by consumers. This section explores the potential channels through which local currency schemes could, however, impact the Bank's monetary or financial stability objectives, should the schemes become significantly larger and/or if the backing arrangements were to change.

Monetary stability

In principle, local currencies could affect the stance of monetary policy if the aggregate amount of spending in the economy, and hence pressure on the price level as captured by the consumer prices index, is affected as a result of the schemes. This could arise, for instance, if the net impact of local multiplier effects were to significantly boost economic activity; or, on the other hand, if the reduced trade with non-local suppliers were to make scheme participants less competitive, resulting in significantly lower levels of economic activity at the macroeconomic level.

In practice, the size of UK schemes relative to aggregate spending in the economy is currently too small to have a significant impact on the price level or the desired path for monetary policy. Moreover, even if the schemes were large enough to affect spending at the macroeconomic level, this would not impede the Bank's Monetary Policy Committee's (MPC's) ability to set monetary policy to meet its inflation target unless these impacts were unanticipated over the MPC's forecast horizon.

Confidence in the currency

In addition to price stability, monetary stability requires that people are confident that the banknotes they hold are worth their face value. The primary risk to this is counterfeit notes. Given that the production costs of banknotes are far below their face value, there is a potential for criminals to attempt to copy and pass counterfeit notes. As counterfeits are

worthless, the Bank of England maintains confidence in the physical currency by enabling users to authenticate, and therefore only accept, genuine notes. This is achieved by the use of robust security features and a programme of education on how to identify genuine banknotes.

The risk of counterfeits applies to any paper instrument where the face value exceeds the cost of printing the instrument. One concern is whether a successful counterfeit attack on a local currency voucher scheme might generate a spillover effect that reduces confidence in other physical instruments, like banknotes. To reduce the risk of counterfeits, certain local currency schemes have issued vouchers with a number of security features, together with educational material on how to identify them.⁽²⁾

It is difficult to know to what extent (if any) the public perceives any relationship between local currency schemes and central bank note issuance. The banknote-like appearance of some local currency vouchers and their acceptance across many diverse businesses may foster such a perception. However, the currencies' positioning as local initiatives, where possible not describing the vouchers as 'notes', and incorporating features commonly associated with vouchers such as expiry dates, may help to counteract this. The limited scale of current schemes is also a mitigating factor.

Financial stability

If large enough, the failure of a local currency scheme could, in theory, have adverse consequences for the stability of the financial system. For example, if local currencies were to become a significant part of the payments system, scheme failures could lead to a reduction in access to payment services. One possible source of failure would be a 'run' on a scheme, which could arise if the users of a scheme perceived the value of local currency in circulation (the scheme's liabilities) to exceed the value of sterling deposits backing the scheme (the scheme's liquid assets). Since participants of the scheme would be handled on a first-come, first-served basis, a scenario such as this could lead to a large number of users of the local currency to try to redeem the sterling value of their vouchers at the same time. Furthermore, the impact of a scheme failure could bring wider implications for financial stability if the failure of one local currency scheme triggered a run on others, or if the users of a scheme incurred losses that in turn caused them to default on other obligations (such as loan repayments) to the banking sector.

However, the *de facto* one-for-one backing with sterling that is in place for the current local currency schemes mentioned in this article should, in part, mitigate the risk that holders lose

This is detailed in the Industrial and Provident Societies and Credit Unions Order 2011.

⁽²⁾ See, for example, the Bristol Pound security guide: http://bristolpound.org/library/Download_docs/Security_Guide.pdf.

confidence in a scheme's ability to make payments back into sterling. A scheme that securely ring-fences the backing assets should impart even greater confidence, thus further reducing the likelihood of a run. Local currency denominated deposit accounts held by consumers in a supporting financial institution would be subject to Financial Services Compensation Scheme (FSCS) deposit protection that could further help to reduce the risk of a run, although the paper instruments issued by a scheme would not be subject to this protection.

Impact on user protection

Under Part VI of the Banking Act 2009, the Bank of England is responsible for regulating commercial banknote issuance in Scotland and Northern Ireland. The primary objective of this legislation is to offer noteholders (and therefore consumers) protection in the event of the issuer entering an insolvency process. (See the box on S&NI banknotes on page 4 for more information.)

Local currency schemes are completely independent from the Bank of England. As they are also independent from S&NI banknote issuance, they are not covered by Part VI of the Banking Act 2009. As such, users do not benefit from the same level of protection as banknote holders. See Table B for a summary of the risks to holders of Bank of England banknotes, S&NI banknotes and local currency vouchers. Indeed, all vouchers, including those issued by a local currency scheme, carry credit risk — that is, the risk that the issuer may fail to repay holders the full face value of their vouchers. The credit risk to holding any voucher is directly linked to the creditworthiness of the issuing scheme. Just as holders of retail vouchers can lose out if the issuing retailer goes into administration (as happened to holders of certain Zavvi vouchers in 2008, for example), holders of local currency vouchers could incur losses if the issuing scheme were to fail.(1)

Given that the current UK schemes generally back the vouchers one-for-one with sterling, holders of existing local currency vouchers should, in theory, be able to get their money back in the event that a scheme fails. However, because the backing assets for local currencies are not legally ring-fenced, these assets could be used to satisfy the claims of other creditors from any other aspects of a scheme's business and not just holders of local currency vouchers in the event of an insolvency process. Therefore, the potential impact on consumer protection is limited insofar as the schemes ensure that the assets are in practice securely ring-fenced.

Although the Bank of England has no remit for local currencies *per se*, one concern is whether the public might believe that it does. It is possible that some local currency users may have an incorrect expectation of recompense from the Bank in the event of a scheme failure. This might arise if a scheme

involves a financial institution that is regulated by the Bank's Prudential Regulation Authority. Alternatively, the Bank of England's role under the Banking Act 2009 for commercially issued notes in Scotland and Northern Ireland may lead members of the public to expect the same degree of oversight and protection with regard to the backing of local currency vouchers, particularly if they are incorrectly perceived to be banknotes.

Given that the physical instruments issued by UK local currency schemes are not subject to FSCS protection, any scheme that makes this clear under its terms and conditions may help ease public expectations about recourse (or lack thereof) to the Bank of England, HM Treasury or FSCS. In addition, to help make clear the status of local currencies, the Bank has published on its website a set of frequently asked questions, which states that users will not receive compensation from the Bank in the event of a local currency scheme failure.⁽²⁾

Conclusion

The emergence of various local currency schemes over the past few years marks a continuation of private companies and schemes offering alternative media of exchange to meet specific purposes. While there are a number of routes through which local currencies could theoretically impact the Bank's objectives, the limited sizes of the schemes (both individually and in aggregate) relative to aggregate spending in the economy mean that they do not currently present a risk to the Bank's ability to meet its monetary stability objective. This, in addition to the general one-for-one backing with sterling, also reduces the risk to financial stability insofar as the schemes securely ring-fence the backing deposits (at least, in practice). Nevertheless, a risk to the Bank could arise if consumers mistakenly associate local currencies with banknotes. Such a perception could generate a spillover effect if, for example, a successful counterfeit attack on a local currency were to reduce confidence in banknotes more generally, or, in the event of a scheme failing, consumers were to incorrectly expect recompense from the Bank. Schemes adopting specific features and marketing material designed to help users recognise that local currency instruments are like vouchers and not banknotes may help to counteract this risk.

⁽¹⁾ As explained on page 3, Bank of England and S&NI noteholders are protected from credit risk given that the notes are settled across the central bank's balance sheet, or are subject to ring-fenced backing assets and central bank settlement at all times.

⁽²⁾ See www.bankofengland.co.uk/banknotes/Pages/localcurrencies/default.aspx.

Table B Summar	y of the status of Bank	of England notes	. S&NI notes and UK	local currencies

Instrument issuer	Bank of England banknotes	S&NI banknotes	Local currencies
Legal status	Legally banknotes — authorised by Bank Charter Act 1844.	Legally banknotes — authorised by Banking Act 2009.	Similar legal status to vouchers or electronic balances.
Legal tender status	Legal tender in England and Wales.	Not legal tender. ^(a)	Not legal tender. ^(a)
Value in circulation	£54.2 billion. ^(b)	£6 billion. ^(b)	Less than £500,000.
Population of area ^(c)	Whole of United Kingdom (63.7 million).	Scotland (5.3 million) and Northern Ireland (1.8 million).	A local area or high street — the largest scheme currently targets population area of 1 million.
Risks to holders of the instrument	Instrument is a claim on the central bank hence no exposure to market or credit risk.	Banking Act 2009 introduced the ring-fencing of backing assets and guaranteed central bank settlement at all times; hence level of credit protection comparable to Bank of England note users.	No mandated credit protection for paper-voucher users. While existing schemes have generally issued vouchers that are backed one-for-one with sterling, the funds are not legally ring-fenced.(d)
Anti-counterfeiting measures	Use of robust security features and a programme of education on how to correctly identify genuine banknotes.	Security features (the strength of which is selected by the issuer) and education are often used.	Security features (the strength of which is selected by the issuer) and education are often used.

However, 'legal tender' has a very narrow meaning, as explained in the box on page 5. Estimated values as at 28 February 2013.

Mid-2012 population estimates from the Office for National Statistics.

References

Blanc, J (2006), 'Local currencies in European history: an analytical framework', International Scientific Conference, Weimar University, Germany, September.

Byatt, D (1994), Promises to pay: the first three hundred years of Bank of England notes, Bank of England.

Champ, B (2008), 'Stamp scrip: money people paid to use', Federal Reserve Bank of Cleveland Economic Commentary, January.

DeMeulenaere, S (1998), 'An overview of parallel, local and community currency systems', Complementary Currency Resource Centre.

Fisher, I (1911), The purchasing power of money.

Gesell, S (1916), The natural economic order. Translated from German by Philip Pye M.A.

Gul, F and Pesendorfer, W (2001), 'Temptation and self-control', Econometrica, Vol. 69, No. 6, pages 1,403–35.

Kennedy, M (1995), Interest and inflation free money: creating an exchange medium that works for everybody and protects the earth, New Society Publishers.

Keyworth, J (2013), 'The Old Lady of Threadneedle Street', Bank of England Quarterly Bulletin, Vol. 53, No. 2, pages 137-46.

Kiyotaki, N and Moore, J (2001), 'Evil is the root of all money', The American Economic Review, Vol. 92, No. 2, pages 62-66.

Krohn, G and Snyder, A (2008), 'An economic analysis of contemporary local currencies in the United States', International Journal of Community Currency Research, Vol. 12, pages 53–68.

Ryan-Collins, J, Greenham, T, Werner, R and Jackson, A (2011), 'Where does money come from? A guide to the UK monetary and banking system', New Economics Foundation, September.

Sanders, M (2011), 'Local currencies', University of Bristol and CMPO.

Schelling, T (1984), 'Self-command in practice, in policy, and in a theory of rational choice', The American Economic Review, Vol. 74, No. 2, pages 1-11.

⁽d) For electronic balances, only those held in the accounts of a supporting FSCS-registered financial institution are FSCS protected, subject to the usual limits.