

# Financial Scrutiny Unit Briefing

## The currency of an independent Scotland

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The choice of currency is one of the biggest economic decisions that would need to be made if Scotland was independent, central to the long-term success of the Scottish economy.

The Scottish Government has stated that its preferred currency arrangement for an independent Scotland is a pound sterling monetary union with the rest of the UK. However, the UK Government has ruled out this option if Scotland became independent.

This briefing outlines the main currency options for an independent Scotland, the advantages and challenges associated with each option and key considerations that should be taken into account when assessing the options.



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## EXECUTIVE SUMMARY

After the Act of the Union in 1707, pound sterling replaced the pound Scots as the official currency of Scotland. Although pound sterling was the dominant currency of world trade under the gold standard, throughout the 20<sup>th</sup> Century the dollar became the preferred currency. Pound sterling is currently the fourth most traded currency in the world after the dollar, the euro and the Japanese yen.

Notable features of the Scottish economy when considering currency include the relative dominance of financial services and the oil and gas sector. The Scottish economy is also relatively closely aligned with the UK economy. Analysis of economic trends since 1964 by the Fiscal Commission Working Group suggests that there have been relatively few periods when the two economies are noticeably divergent. However, this is perhaps not altogether surprising given the existing constitutional arrangements. If an independent Scotland was to make different currency choices and apply different monetary and/or fiscal policy then there may be divergence between the two economies.

The Scottish Government has stated that its preferred currency arrangement for an independent Scotland is a monetary union with rUK, as recommended by the Fiscal Commission Working Group in its assessment of currency options. The Group argues that it is attractive because the UK is Scotland's principal trading partner, there are a number of significant pan-UK companies operating in Scotland, there is labour mobility between Scotland and the UK, the economies are broadly aligned, there is a relatively high degree of synchronicity and it would provide a stable environment for the transition to independence. However, the UK Chancellor of the Exchequer, George Osborne, has ruled out a formal monetary union with an independent Scotland, stating that the Treasury's Permanent Secretary had advised against it for a number of reasons. These reasons include that he is concerned that the Scottish Government has left open the option to leave the currency union, he feels that there is a risk that rUK would bear most of the liquidity and solvency risk, he believes that there is a real possibility that rUK would have to 'bail out' Scotland in the event of a financial or fiscal crisis and his belief that separate fiscal policy would bring about economic divergence putting pressure on the monetary union.

Nicola Sturgeon, Deputy First Minister and Cabinet Secretary for Infrastructure, Investment and Cities, told the Economy, Energy and Tourism Committee that "we think that the position that the Chancellor of the Exchequer outlined last week will not hold up in the reality of a yes vote." Nevertheless, the Scottish Government is under pressure to outline its 'Plan B' for an independent Scotland. Other possible currency arrangements include continued use of pound sterling in an informal currency union or establishing a new Scottish currency.

There are a number of advantages and disadvantages associated with any of these alternative scenarios. Key considerations that need to be taken into account when evaluating any currency option include its impact on factors such as; the economic tools available for macroeconomic stabilisation, trade, borrowing costs, capital flight and the transfer of debt.

# BACKGROUND

## THE NATURE OF THE SCOTTISH ECONOMY

Following the Acts of Union in 1707, Scotland adopted pound sterling as its currency. Scotland is a relatively small economy, with GDP (including a geographic share of North Sea output) of similar scale to countries such as Finland, Ireland or Portugal. The majority of output comes from the service sector. In particular, Scotland has a relatively big financial sector that operates internationally and is dominated by two large banks; the Royal Bank of Scotland and the Bank of Scotland. Another distinguishing feature of the Scottish economy is its large oil and gas sector. Allocating a geographic share of North Sea output to Scotland increases national GDP by 17.5% in 2011-12 ([Scottish Government](#) 2013a).

Scotland accounts for around 10% of UK GDP. The rest of the UK (rUK) is its main trading partner with exports from Scotland to rUK estimated at around £48 billion (70% of total Scottish exports) and imports from rUK to Scotland estimated at around £60 billion in 2012 (75% of total Scottish imports) ([Scottish Government](#) 2013b). A large number of businesses operate across Scotland and the UK and almost one in five employees in the Scottish private sector work for enterprises with ultimate ownership in the rest of the UK ([Scottish Government](#) 2013c). The UK has been in the European Union since 1973. Almost half of the value of international exports from Scotland was destined for the European Union in 2012 (£12 billion).

In general, recent trends in the Scottish economy have mirrored those seen in the UK. In their [Assessment of Key Currency Options](#), the Fiscal Commission Working Group looked at output in Scotland and the UK since 1964 and concluded that “there have been relatively few periods when the two economies are noticeably divergent”. In contrast, the Group states that “On many key macroeconomic indicators, Scotland is currently less aligned with the Euro Area than it is with the UK” (Scottish Government 2013d).

It is important to note that the current alignment partly reflects the existing constitutional arrangements and in particular the fact that the same monetary policy and broadly similar fiscal policy is applied across Scotland and the UK<sup>1</sup>. This alignment may or may not continue in an independent Scotland, depending on factors such as currency choice and fiscal and monetary policy decisions.

## KEY ECONOMIC TOOLS AND HOW THEY ARE IMPACTED BY CURRENCY ARRANGEMENTS

Economic policy is generally aimed at stabilising fluctuations in output and inflation so that economic growth remains close to trend while pursuing policies to raise the trend rate of growth itself. The two main tools of economic policy are fiscal policy and monetary policy, with the latter often under the control of an independent central bank. These two policies can broadly be pro-cyclical or counter-cyclical.

A country's currency arrangement, whether it has its own currency, whether it is linked to other currencies, etc. affect the degree of freedom that central banks and governments have in their monetary and fiscal policies.

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<sup>1</sup> The rates of certain taxes are set in Scotland (Council tax, non-domestic rates), the Scotland Act 2012 includes provisions for devolving two minor taxes, establishing a Scottish rate of income tax and gives certain borrowing powers to the Scottish Government, and the Scottish Government can decide where to spend its non-ring-fenced budget. However, most fiscal policy is still centralised with the UK Government.

## Monetary policy

Central banks are usually independent of the Government and have certain targets e.g. inflation, economic growth and employment levels. In order to achieve its targets, central banks use monetary policy. This includes setting interest rates and increasing or decreasing the supply of money. For example, if inflation is too high, the central bank may choose to call money back e.g. by selling its assets. It can also buy foreign government bonds e.g. the Chinese Central Bank owns a proportion of US government bonds and sells and buys these bonds according to domestic inflation. The more foreign assets it holds, the lower the money supply in the domestic economy.

## Fiscal policy

Fiscal policy is the means by which a government adjusts its borrowing levels, spending levels and tax rates to influence economic performance and achieve its social objectives.

Pro-cyclical policy includes fiscal austerity in response to economic downturns (i.e. reducing government spending and raising taxes) and fiscal stimulus (i.e. increasing spending and cutting taxes) in times of economic expansion. Counter-cyclical policy includes for example Keynesian measures of increasing government spending on major infrastructure projects in times of economic downturns and reducing spending and increasing taxes in times of economic booms.

## Exchange rates

A further tool of economic adjustment is exchange rates. For example, a country can devalue its currency vis-à-vis the currency or currencies of its importers, making its exports cheaper and more competitive which can help boost economic growth. This use of exchange rates as an economic adjustment mechanism can be limited under different currency arrangements. For example, sharing a currency reduces the ability of individual countries to use exchange rates as an adjustment mechanism and puts the burden of economic adjustment on domestic prices and wages and the use of fiscal policy. This was shown recently in Greece. Because Greece is a member of the Eurozone, when it experienced a balance of payments deficit and steeply rising debt following the 2008 financial crisis, the government could not easily devalue its currency to make its exports more competitive and help the economy recover at a faster pace. Instead, unemployment soared and wages decreased. This eventually led to deflation, making prices in Greece more competitive, which will in theory increase demand for Greek products and services and help restore economic growth in the long term.

Currency arrangements are often characterised by the extent to which exchange rates are managed, outlined in more detail in Annex 2. A fixed or a pegged exchange rate limits the options available in monetary policy as interest rates tend to be aligned between the two currencies and determined by the currency that is used the most. There is also the risk of being affected by inflation or deflation in the country to which the smaller country's currency is pegged.<sup>2</sup> The lack of exchange rate risk may keep the borrowing costs lower for the smaller nation than they would otherwise be, although the borrowing costs of countries using the same currency can and do diverge widely.

## IMPLICATIONS FOR AN INDEPENDENT SCOTLAND

The currency arrangements of an independent Scotland will determine the economic tools that the Government has at its disposal. At one extreme, Scotland could in theory have total

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<sup>2</sup> For example, in the early 1990s, Russia began to experience currency instability and hyperinflation. The new states which were formerly part of the USSR risked importing hyperinflation if they stayed with the rouble, so many of them established their own currencies.

independence over both monetary and fiscal policy through the use of its own currency and at the other extreme Scotland may be in a monetary union with no monetary policy of its own, significant limitations on its fiscal policy and reduced ability to use exchange rates as an adjustment mechanism.

## POSSIBLE CURRENCY ARRANGEMENTS

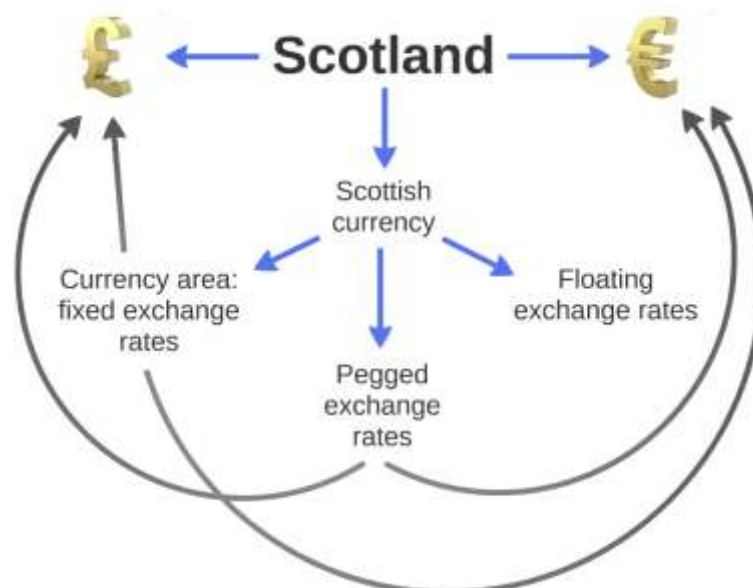
The currency options available to an independent Scotland and decisions reached may be constrained or influenced to a certain extent by a number of factors such as public opinion in Scotland, the decisions of the UK Government, members of the EU and financial markets. For example, financial market perceptions of macroeconomic stability could affect borrowing costs and affect decisions about currency arrangements.

At this stage, Scotland has two main options:

- To have its own currency (referred to hereafter as the Scottish pound)
- To share a currency with another nation (the pound) or a group of nations (the euro)

If Scotland had its own currency, it would have to decide whether it linked the value of the Scottish pound to another currency (or basket of currencies). Doing so may bring economic benefits but could also entail a loss of economic powers. These options are summarised in Figure 1.

Figure 1 Currency arrangements for Scotland



As shown in Figure 1, there are different ways in which Scotland could be part of a currency area: this is *de facto* the case if it uses the pound sterling or the euro, but could also occur if Scotland linked the Scottish pound to the euro or the pound sterling at a fixed rate for example. Because of the potential economic benefits of being in a currency area, it is worth considering what makes for an optimal currency area and what different types of union Scotland could consider being a member of.

## WHAT MAKES AN OPTIMAL CURRENCY AREA?

In order for any currency area to be successful, its constituent members must have a robust economy and a sound and stable financial system. This requires low and stable inflation,

currency stability, a strong balance of payments position, sound public finances and institutional structures that promote financial stability and that mutualise risks and pool fiscal resources.

Currency areas are a domain in which exchange rates are fixed ([Mundell 1961](#)). The criteria developed by Mundell for 'Optimal Currency Areas' (OCA) assess whether a given country should be part of a currency area and where the borders of a currency area should be drawn. OCA literature holds that the essential ingredient of a common currency or a single currency area is an area where factors of production are mobile internally (both geographically and inter-industry) but immobile externally. Failing that, two nations are better off having flexible exchange rates with one another ([Horvath & Komarek 2002](#)).

Many recent studies that have looked at the European Economic Monetary Union (EMU) focus on four relationships among the members ([Horvath & Komarek 2002](#)). They are highlighted in bold in Table 1 which lists the key theoretical criteria for a successful currency area.

**Table 1 Requirements for a successful currency area**

Currency area	
<b>Necessary</b>	<ul style="list-style-type: none"> <li>Country has to accept integrative measures and subsequent loss of sovereignty</li> <li>Inflation for the different members should be broadly aligned</li> </ul>
<b>Useful</b>	<ul style="list-style-type: none"> <li><b>Synchronised business cycles<sup>3</sup></b></li> <li>Integration of intermediate and final product markets</li> <li><b>High degree of cross-border trade</b> relative to domestic demand</li> <li><b>Mobility of capital<sup>4</sup> and labour</b></li> <li>Banking union</li> <li><b>Fiscal integration</b> beyond a banking union</li> </ul>
<b>Not always necessary</b>	<ul style="list-style-type: none"> <li>Economic similarity (e.g. industrial structures of US states are very different)</li> </ul>

## DIFFERENT TYPES OF UNION

There are different types of currency areas according to their degree of integration: informal currency unions, monetary unions and banking unions.

### Informal currency union

In an informal currency union, a country unilaterally (i.e. without necessarily consulting the other party) adopts another country's (or currency area's) currency as legal tender. For example, Montenegro started using the euro in 2002 despite not being a member of the Eurozone.

Note that when a country fixes or pegs its currency to another, e.g., using a currency board as is the case in Hong Kong, this is also a form of currency union.

### Monetary union

Monetary unions are sometimes referred to as formal currency unions ([Armstrong & Ebell 2014](#)). A monetary union implies the use of a shared central bank and a single currency.

<sup>3</sup> However, when EMU was set up in 1999, national business cycles were imperfectly synchronized across its members ([Rose 2008](#)).

<sup>4</sup> Although the free movement of capital can have negative effects e.g. if one part of the area suffers economically, investors from other parts can withdraw funds easily which can undermine financial and economic stability

There are shared monetary and financial regulatory policies. For a monetary union to be successful, inflation across the different units should be broadly synchronised.<sup>5</sup> Because fiscal policy has an effect on the economy and inflation, there may be the need for the different members of a monetary union to have aligned fiscal policies. However, their ultimate success depends not so much on how optimal they are economically, but on political will.

## **Banking union**

Effective currency unions need a wide range of institutions to support an efficient financial sector ([Carney 2014](#)). If these functions are integrated, then the participants may constitute a banking union and share:

- Common supervisory standards
- Access to central bank liquidity and lender of last resort facilities
- Common resolution mechanisms
- A credible deposit guarantee scheme

Thus banking unions are in a sense financially integrated monetary unions.

## **CURRENCY OPTIONS FOR AN INDEPENDENT SCOTLAND**

The key currency options for an independent Scotland are outlined below. Note that each currency option offers a different trade-off between minimising exchange costs to support transactions across the border versus the scope for setting independent economic policy ([Armstrong & Ebell 2014](#)).

### **FORMAL POUND STERLING MONETARY UNION**

This is the preferred option of the Scottish Government and The Fiscal Commission Working Group (FCWG) ([Scottish Government 2013e](#)). The Group recommended that the Scottish Government retain the pound sterling immediately post-independence through a formal monetary union with the rest of the UK (rUK). A formal monetary union would involve significant limitations on monetary and fiscal policy-setting but the need for distinct monetary policies is reduced if the economic activities of the different constituent members of the union are broadly synchronised. The FCWG argue that this arrangement is preferred because the UK is Scotland's principal trading partner, there are a number of significant pan-UK companies operating in Scotland, there is labour mobility between Scotland and the UK, the economies are broadly aligned, there is a relatively high degree of synchronicity and it would provide a stable environment for the transition to independence.

This arrangement would involve an independent Scotland retaining the UK's central bank, the Bank of England (BoE). Under current constitutional arrangements, the BoE is obliged to have some regard to the effects of its monetary policies towards Scotland (along with other regions/countries of the UK). This obligation may cease under other constitutional arrangements, but Scotland would seek representation on the BoE's Monetary Policy Committee on the basis of population. However, even if such representation were agreed, the large difference in size between Scotland and the rest of the UK is a critical limitation to how

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<sup>5</sup> For example, in a currency area where each member has its own currency, if one member experiences high economic growth and inflation and another member experiences an economic slump and deflation, there is a lot of domestic pressure on the country undergoing an economic downturn to devalue. In a single currency area, this country has an incentive to leave the currency area in order to be able to devalue its currency. For example, Greece may have recovered more successfully from its economic recession if it had the option of devaluing its currency relative to the euro.



effective Scotland may be in influencing monetary policy ([Armstrong & Ebell 2014](#)). The FCWG has also suggested the creation of a supranational central bank with the BoE and a newly formed Central Bank of Scotland as members or through a joint ownership and governance structure of the BoE based on population.

However, the UK Government and all three major political parties in the UK stated on 13 February 2014 that they would not allow Scotland to formally retain the pound sterling. The Chancellor of the Exchequer, George Osborne affirmed in a speech that formal monetary union between an independent Scotland and rUK is not an option ([UK Government 2014a](#)):

“First of all, the Scottish government say “it’s as much Scotland’s pound as the rest of the UK’s”. They are like an angry party to a messy divorce. But the pound isn’t an asset to be divided up between the two countries after break-up as if it were a CD collection... A vote to leave the UK is also a vote to leave these unions and those transfers and those monetary arrangements. That’s part of the choice that people in Scotland are being asked to make. There’s no legal reason why the rest of the UK would need to share its currency with Scotland.”

The Chancellor advises against a currency union for the following reasons:

- The Scottish Government has left open the option to leave a currency union. However, according to the Treasury, “successful currency unions are based on the near universal belief that they are irreversible.”
- The size of Scotland’s banking sector relative to its national income means “there is a very real risk that the continuing UK and its taxpayers would end up bearing most of the liquidity and solvency risk which it creates”
- “Asymmetry” leading a real possibility that the continuing UK has to “bail-out” Scotland in the event of a financial or fiscal crisis. However assistance could not be reciprocated: “it is inconceivable that a small economy could bail-out an economy nearly ten times its size”
- An independent Scotland’s fiscal policy would become “increasingly misaligned” from a continuing UK’s. Such divergence would eventually put “intolerable pressure on the currency union.”

The Chancellor’s speech and his Permanent Secretary’s letter ([UK Government 2014b](#)) summarise the key points from HM Treasury’s *Scotland Analysis: Assessment of a sterling currency union* ([UK Government 2014c](#)) published on the same day.

The [Scottish Government’s submission to the Scottish Parliament Economic, Energy and Tourism Committee](#), sent on 14 February 2014 highlights that the FCWG have considered the technical details of a formal monetary union in detail and responds to the UK Government’s four points.<sup>6</sup> The Scottish Government reiterates its belief that political unions are not a requirement for successful monetary unions, pointing to the union between Belgium and Luxembourg that existed until 1999. The Scottish Government agrees that aggregate borrowing and debt levels would have to be agreed between partners in a monetary union; however, on the matter of fiscal flexibility it states there are many examples, even within unified states, that demonstrate national/regional variations in taxation levels without any accompanying currency pressures. Furthermore, the Scottish Government also highlights its belief that a monetary union would benefit the people of a continuing UK as well as those in Scotland. According to the Scottish Government:

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<sup>6</sup> See Annex G of the submission.

- Scotland is a key trading partner for the rest of the UK, which exports more to Scotland than to Brazil, South Africa, Turkey, Russia, India, South Korea, China and Japan put together.
- Scottish oil and gas production would boost the Sterling Area's exports by £30 billion
- Scotland and the UK are better suited to monetary union than the Eurozone economies (pointing to very similar productivity and output per capita rates)

Thus, based on the analysis of the FCWG, the Scottish Government reiterate their belief that a formal pound sterling monetary union would be in the interests of both Scotland and rUK.

The [Scotsman](#) (2014a) reports that First Minister Alex Salmond stated he would refuse to publicly consider an alternative to the Scottish Government's preferred arrangement of formally retaining the pound sterling. He has also stated his belief that the UK Government would change its mind about entering a monetary union if Scotland became independent ([The Telegraph](#) 2014). Although the Scottish Government states in [Scotland's Future](#) that an independent Scotland will take on a share of the UK's national debt, and be entitled to a corresponding share of assets, First Minister Alex Salmond has warned that Scotland could walk away from its share of the UK's national debt if the UK Government rejects its terms for a monetary union ([Scotsman 2014](#)).

## **INFORMAL USE OF POUND STERLING: 'STERLINGISATION'**

'Sterlingisation' refers to the process of continuing to use the pound sterling in an informal currency union. First Minister Alex Salmond's comment that "It's not a question of keeping the pound, it's a question of whether there would be agreed a currency union" suggests that 'sterlingisation' would be considered for an independent Scotland ([The Telegraph 2014](#)).

In practice there is very little that a country can do to restrict the use of its currency by another country. As noted by the ECB when questioned on Montenegro's use of the euro despite not being an EU member:

“...since the euro is a global currency, which is traded internationally and can be purchased anywhere in the world, it is not for the ECB to control such and it is not for the ECB to either prohibit or promote the use of the euro.” ([DW 2013](#))

However, 'sterlingisation' would limit the amount of liquidity support the central bank could provide to any excess of assets over liabilities as it would not be able to increase the supply of money. In periods of financial distress, and where there is a central bank, the central bank could avoid investor flight by raising interest rates but at the risk of damaging its own economy ([Armstrong & Ebell 2014](#)).

It is worth noting that countries that informally use another currency or tie the value of their currency to another currency are usually small states which rely heavily on trade or larger countries with a poor record of economic management. [Armstrong](#) (2014) notes that if Scotland were to choose such an option, it would be by far the largest and wealthiest country to do so.

The advantages and challenges of informally using a currency compared to a formal currency union are compared in Table 2.

Table 2 Formal versus informal use of the pound sterling

	Formal	Informal
Advantages	<ul style="list-style-type: none"> <li>Promotes trade integration between Scotland and rUK by; eliminating transaction costs (through the absence of currency risk), improving transparency of pricing and promoting competition<sup>7</sup></li> <li>May give Scotland access to more liquid financial markets</li> <li>May reduce borrowing costs for Scotland through increased currency stability and credibility</li> <li>May help align business cycles between Scotland and rUK<sup>8</sup></li> <li>Facilitates mobility of capital and labour<sup>9</sup> and flow of technology/ideas</li> </ul>	
	<ul style="list-style-type: none"> <li>The more a currency is traded, the greater negotiating power given to its users</li> <li>Assumption that the central bank will act as a lender of last resort for institutions in the whole currency zone</li> <li>Scope to participate in monetary policy</li> <li>Allows for economies of scale: <ul style="list-style-type: none"> <li>The bigger the area, the greater insulation against shocks</li> <li>Economies in policy formation<sup>10</sup></li> <li>Economies in information and convenience</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>No permission needed</li> <li>No explicit need for a central bank</li> <li>No need for currency management</li> </ul>
Challenges	<ul style="list-style-type: none"> <li>Loss of instruments that can help absorb costs in the case of asymmetric shocks e.g. limits the effect of changing central bank interest rates and cannot use exchange rates as economic tool</li> <li>Inflation affects all the users of the currency</li> <li>Increased risks and consequences of financial instability</li> </ul>	
	<ul style="list-style-type: none"> <li>Need for integration (institutionally and politically): <ul style="list-style-type: none"> <li>Single monetary policy</li> <li>Similar business cycles</li> <li>Aligned fiscal policy</li> <li>Aligned legislation on labour, private property, contracts, etc.</li> <li>Single/aligned foreign policies</li> </ul> </li> <li>Need to negotiate terms of integration: fiscal limits, debt</li> </ul>	<ul style="list-style-type: none"> <li>Central bank would not act as lender of last resort</li> <li>Likely to decrease credibility</li> <li>Likely to increase uncertainty and volatility</li> <li>Likely to increase borrowing costs</li> <li>No representation or involvement in monetary policy</li> </ul>

<sup>7</sup> Based on the European experience, this is likely to be modest ([Armstrong & Ebell](#) 2014).

<sup>8</sup> Thus one of the key optimum currency area criteria is endogenous to the decision to join ([Carney](#) 2014). [Frankel and Rose](#) (1998) argue that business cycles and trade integration are inter-related and both endogenous processes to establishing a currency union.

<sup>9</sup> This would be conditional on the nature of the border between Scotland and rUK.

<sup>10</sup> As noted by [Mundell](#) (1997), “when a small country fixes its currency to that of a larger country with an acceptable inflation rate, it sets the course for the rest of its macroeconomic policy.” This can be an advantage or a disadvantage.

	reduction, influence on monetary policy, lender of last resort, financial regulatory authority, sanction mechanisms for non-compliance, etc.	
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Euro</li> </ul>	<ul style="list-style-type: none"> <li>• Euro: Kosovo<sup>11</sup>, Montenegro, Zimbabwe</li> <li>• Chinese yuan: Hong Kong, Macau, North Korea (until 2009), border towns in Burma</li> <li>• US dollar: many countries including Afghanistan, Cambodia, Liberia, Haiti, Zimbabwe, Guatemala, British Virgin Islands, Ecuador, Panama</li> </ul>

## ALTERNATIVE CURRENCY ARRANGEMENTS

Some economists have argued that alternative currency arrangements would offer greater benefits to an independent Scotland. Indeed, the Scottish Government itself ([Scottish Government](#) 2013d) notes that in the medium and long-term an alternative arrangement to a Sterling union may be in Scotland's interests if the Scottish economy grew apart from that of the rest of UK or if the preferences of the people in Scotland change. Some alternative arrangements are outlined below.

### Establishing a new currency: the Scottish pound

A Scottish currency would allow the Scottish Government to set an independent economic policy as recognised by the FCWG ([Scottish Government](#) 2013d) which states that creating a Scottish currency "would represent a significant increase in economic sovereignty, with interest rate and exchange rate policy being two new policy tools and adjustment mechanisms to support the Scottish economy."

Having a national currency would require a central bank. The minimum requirements for a central bank are:

- Provides banking services for the Government
- Enables a Government to borrow
- Issues currency
- Provides independent control of price stability
- Provides financial regulation

In order to guarantee the Scottish pound, the special sterling notes held at the BoE backing the current issuance of Scottish notes could in theory be transferred to the Scottish Central Bank and exchanged for assets to capitalise it. This would be subject to negotiation. Armstrong ([2014](#)) writes that:

"At present [Scottish notes and coins] are issued by three Scottish clearing banks under license from the Bank of England and are fully backed by mega sterling

<sup>11</sup> Kosovo is not an EU member but uses the euro as legal tender despite no formal currency arrangements with the ECB and other European institutions.

notes called giants and titans. The most likely outcome is that the mega notes (or the equivalent value in Bank of England notes) are handed over to the Scottish government which then has 100% asset backing for its new state liability of notes and coins. Scottish and Bank of England notes would continue to circulate alongside each other and be freely convertible at the new central bank of Scotland. To keep the dual currencies at the same value, the issue of each new Scottish note would need to be backed by an increase in Bank of England notes held by the Scottish central bank as foreign reserves.”

Table 3 lists the main advantages and challenges that would be associated with a separate Scottish currency.

**Table 3 Advantages and challenges to a Scottish currency**

	Scottish pound
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Expression of national sovereignty</li> <li>• Allows independent political agenda, economic, monetary and fiscal policies<sup>12</sup></li> <li>• Opportunity to be part of another currency arrangement e.g. fulfils one of the accession criteria to the EU</li> <li>• Removes Scotland from the pound sterling which some believe may not be an optimal currency area as it stands (<a href="#">Cuthbert 2013</a>)</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Major logistical task:               <ul style="list-style-type: none"> <li>○ Institutional change:                   <ul style="list-style-type: none"> <li>▪ Need for a central bank</li> <li>▪ Need for a financial regulatory and supervisory authority</li> <li>▪ Need for a debt management office, capital markets for bonds and equities</li> <li>▪ Need for a revenue and customs office</li> <li>▪ Need for a fully functioning finance ministry</li> <li>▪ Need for a redenomination law to change existing financial assets into new currency<sup>13</sup></li> </ul> </li> <li>○ Transitional costs</li> <li>○ Costs of printing and maintaining the currency</li> </ul> </li> <li>• Potential exchange rate risk through volatility</li> <li>• Risk of capital flight</li> <li>• Scottish pound unlikely to be a major currency used in world trade, but introduction is likely to decrease use of pound sterling</li> <li>• Risk of increased borrowing costs</li> <li>• Perception that Scottish Government is solvent necessary for sustainable domestic debt market to develop</li> <li>• Need for foreign reserves</li> <li>• Scottish central bank would have full responsibility for financial stability</li> <li>• Contemporary need to establish credible lender of last resort</li> <li>• Transaction costs for trading, investing, moving and spending across the border with rUK</li> </ul>

<sup>12</sup> This would only be the case if Scotland were not to be part of a currency area. Membership in any currency area would involve forfeiting the complete independence of at least some of these policies.

<sup>13</sup> This would be easier for household as most loans are under Scots Law than rewriting the contracts of large companies in foreign law ([Armstrong & Ebell 2013](#)).

	<ul style="list-style-type: none"> <li>• Disruption of trade and financial relationship with rUK<sup>14</sup></li> <li>• National sovereignty is limited if Scotland becomes part of a currency area</li> </ul>
<b>Options</b>	<ul style="list-style-type: none"> <li>• Exchange rate fixed/pegged to pound sterling/euro</li> <li>• Floating exchange rates</li> </ul>

As shown earlier in Figure 1, if an independent Scotland established its own currency then the Scottish Government would have to decide whether it remained outside of any currency area and had floating exchange rates or whether it pegged its exchange rate to another currency or basket of currencies.<sup>15</sup>

### The euro

Article 140 of the Treaty on the Functioning of the European Union sets out four convergence criteria that require to be met to enable an EU Member State to join the Eurozone and formally adopt the euro as its currency. One of the criteria outlines the requirement to join the Exchange Rate Mechanism for at least two years before applying to join the Eurozone and also to ensure that the Member State’s own currency is not devalued during that period.

In an interview with the [Scotsman](#) (2012a), Cabinet Secretary for Finance, Employment and Sustainable Growth John Swinney said:

“I can't foresee a set of circumstances that will see the economic conditions being correct for the euro for some considerable time. It would be difficult to define that but it feels neither to me like the short term or the medium term.”

Under the euro, Scotland would likely be required to have a central bank as the national central banks of Eurozone members print and issue euro notes and coins, manage official foreign reserves, conduct foreign exchange operations, define and implement the single European monetary policy, promote the smooth operation of the payments system and the governor could sit on the Governing Council of the European Central Bank.

Table 4 compares the benefits and disadvantages of using the pound sterling compared to the euro.

<sup>14</sup> When New Zealand, the Gambia , Malawi and Tanzania left sterling they all experienced a decline in trade with the UK.

<sup>15</sup> The most likely options are the pound sterling or the euro. Theoretically, pegging a Scottish currency to the US\$ is possible but would make little economic sense given the limited ties between the Scottish and US economy.

Table 4 Euro versus pound sterling

	Pound sterling	Euro
Advantages	<ul style="list-style-type: none"> <li>• Helps transition to independence: ensures a functioning monetary system from day one</li> <li>• Negligible costs of maintaining the pound sterling</li> <li>• No disruption of trading or financial relationships with rUK</li> <li>• Continued transparency of costs</li> <li>• Single monetary policy may be suitable<sup>16</sup> (Scotland/rUK have similar business cycles and economies)</li> <li>• No urgent necessity for a central bank</li> <li>• Optimal if there are fiscal transfers between Scotland and rUK (<a href="#">Armstrong &amp; Ebell 2014</a>)</li> </ul>	<ul style="list-style-type: none"> <li>• Representation of all Eurozone countries in the Governing Council of the European Central Bank</li> <li>• Would potentially increase trade with the Eurozone<sup>17</sup></li> <li>• May facilitate lower borrowing costs</li> </ul>
Challenges	<ul style="list-style-type: none"> <li>• Significantly limits the scope for policy divergence from rUK</li> </ul>	<ul style="list-style-type: none"> <li>• Current economic crisis in the EU</li> <li>• Disruption of trade and financial relationships with the rest of the UK</li> <li>• Key entry requirements<sup>18</sup> e.g. assumption that accession country has its own currency</li> <li>• Public finances must be sustainable: government debt should not be more than 60% of GDP</li> <li>• Scotland must comply with Stability and Growth Pact</li> <li>• Under current set-up, Scotland would need a Central Bank that would issue Euro notes</li> </ul>

<sup>16</sup> Synchronized business cycles importantly reduce the need for national monetary policy (Rose, 2008).

<sup>17</sup> Since the establishment of EMU in 1999, trade within the Eurozone has risen by at least 8% and could be as high as 23% (Rose, 2009). However, Silva and Tenreryo (2010) found that prior to joining the currency union, eurozone countries were already deeply integrated and that there is little evidence that the euro had any effect on trade between these countries.

<sup>18</sup> Current rules assume that the accession country has its own currency for example.

## SUMMARY

The different currency options available to Scotland are summarised in Table 5.

Table 5 Summary of different currency options available to an independent Scotland

Currency	Arrangement	Transaction costs	Monetary policy	Financial stability	Fiscal policy
Own currency	Fixed/Floating	Highest	Central bank of Scotland	Scotland	No formal limits
Pound sterling	Formal	None	Bank of England	Shared with UK	Formal limits
	Informal			Scotland	No formal limits
Euro	Formal	Medium	European Central Bank	Shared with EU	Formal limits
	Informal			Scotland	No formal limits

Source: [Armstrong & Ebell](#) 2013

## KEY AREAS OF DEBATE

### TRANSACTION COSTS

A central consideration for an independent Scotland adopting a new currency would be the impact on trade and transaction costs. Murkens et al. (2002) comment on the potential situation:

“This would not affect trade in oil, as this is denominated in US dollars, as is quite a large part of trade in Scottish electronic products. But all other trade over this border, crossed by more than half of all Scottish non-oil trade, would become burdened by transaction and currency fluctuation costs.”

The Scottish Government has estimated that a separate Scottish currency has the potential to lead to transaction costs for rUK businesses of approximately £500m per year ([Scottish Government](#) 2014). The calculation uses estimates from research on costs and benefits of EMU (estimated to be between 0.1% and 1% of national GDP) and applies them to the value of trade between rUK and Scotland. However, the source from which these figures are drawn in fact relates only to trade in goods. Replicating the Scottish Government methodology using the actual figures for trade in goods and services has the effect of reducing the estimated costs to rUK to £350m rather than £500m (although the Scottish Government have said that they used a lower estimate of transaction costs as a share of GDP from the EC research to compensate for not including the trade in services. Using a higher figure for EU transaction costs would imply higher transaction costs from a separate Scottish currency).

Douglas Fraser at the BBC used the Scottish Government’s estimate to calculate the transaction costs for Scottish businesses. He states:



“...if business in the rUK could expect to face £500m exchange transaction costs, then it follows that Scotland, with lower sales of goods and services into the rUK, could - very roughly - expect a business cost of £400m. A smaller figure, but proportionately a lot more” ([BBC](#) 2014).

However, it should be noted that these calculations are based on the estimated savings from joining a currency union; the costs from leaving a currency union might not be of the same magnitude. It should also be noted that neither figure takes account of any behavioural effects i.e. the volume of trade between Scotland and rUK might change under alternative currency arrangements. A study by [Glick and Rose](#) (2001) looked into the effect of currency union dissolution on bilateral trade and found that a decline in trade is typically observed. For example, when New Zealand, the Gambia, Malawi and Tanzania left sterling they all experienced a decline in trade with the UK. However, the same study, and another by [Thom and Walsh](#) (2001) found that a decline in trade was not observed in the case of Ireland-UK. Instead, they found that immediately after Ireland’s departure from pound sterling in 1979 its trade with Britain fell for a number of years but growth subsequently resumed with no persistent negative effect apparent.

There are many examples of countries that use different currencies from their main trading partners. Armstrong and Ebell note that a casual look at European countries that have a separate currency (e.g. Norway, Sweden, Denmark and Switzerland) shows that this currency arrangement does not have obvious trade disadvantages (Armstrong & Ebell 2014).

## LENDER OF LAST RESORT

Any currency arrangement needs adequate mechanisms in place to enable the Government to react to adverse economic circumstances. The FCWG explains that the lender of last resort is “the safety net that extends to a solvent financial institution operating in their jurisdiction when it cannot obtain finance from market sources. It can also refer to the role that a central bank has in the provision of market-wide liquidity” (Scottish Government 2013e). It is argued that a lender of last resort underpins the credibility and stability of private financial markets.<sup>19</sup> Standard & Poor’s ([2014](#)) for example notes:

“...a decision by a sovereign Scotland to issue its own new and untested currency or to unilaterally adopt the currency of another sovereign - without gaining access to that currency's lender of last resort - could pose some initial risks to external financing.”

In order to avoid moral hazard related to the existence of a lender of last resort, prudential rules and fiscal constraints can be established to reduce the risk of over-leveraging by private industry. The lender of last resort can also reduce moral hazard by providing liquidity at a cost, therefore ensuring profit from interventions.

There has been much debate around who would act as lender of last resort to an independent Scotland under different currency arrangements. There are a number of examples of cross-border approaches to financial stability. The FCWG notes that in the recent financial crisis “Central banks and national governments did not restrict their support to domestic institutions,

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<sup>19</sup> However, the extent to which a lender of last resort is expected to help institutions in distress is a political issue. Traditionally states were expected to help only solvent institutions with liquidity issues and in some cases have guaranteed deposits in the event of a bankruptcy. Since the 2008 Crisis states have stepped in to help illiquid institutions, the solvency of which has been questioned. This has had the effect of socialising private debt. Iceland however refused to “bail-out” its failing institutions and carried out a major structural reform of the banking industry instead. While this severely affected its economy in the short-run, the economy and public finances have been recovering since 2010.

and in some cases, cross-border support was provided on a joint basis” (Scottish Government 2013e). Standard & Poor’s also highlighted the example of an agreement for access to liquidity in place between Lichtenstein and Switzerland (2014). Under the Sterling Monetary Framework several UK subsidiaries of foreign banks have access to lender of last resort facilities at the BoE. Under independence, subsidiaries of qualifying Scottish banks in rUK may be able to join this framework. However, [Armstrong & Ebell](#) believe that there is a substantive difference between providing sterling liquidity to institutions operating in the UK and providing open support facilities to institutions in what might become an off-shore sterling market (2014).

The UK Government argues that a key issue is the problem of asymmetry, stating:

“The continuing UK would be at risk of providing taxpayer support to the Scottish financial sector and sovereign. An independent Scottish state would not face the same risk as it is inconceivable that a small economy could bail-out an economy nearly ten times its size” (2014b).

In response, the Scottish Government points out that a whole range of reforms to the financial sector, both nationally and internationally, have been introduced since the 2008 financial crisis making any need for bank bailouts less likely. As such, it believes that there would be minimal risk to taxpayers in the rUK from Scottish banks. It goes on to argue that an independent Scotland would be less exposed to risks from its financial sector than the whole of the UK, stating that “the size of the Scottish financial services sector as a proportion of the overall onshore Scottish economy is 8.0% – similar to the UK – and smaller than the UK at 6.7% when a geographical share of oil and gas output is included” (Scottish Government 2014).

The Governor of the Bank of England, Mark Carney, has stated that under a formal monetary union “The Bank of England would implement whatever monetary arrangements were put in place” ([Bank of England](#) 2014b). However, [Armstrong](#) believes that the BoE would refuse to act as lender of last resort for Scottish banks and the Scottish economy in an informal currency union, as this would be a potential cost for taxpayers throughout rUK without Scottish institutions or taxpayers incurring any cost (beyond following prudential requirements for financial institutions and accepting fiscal constraints for the Government). He goes on to state that one solution to this is that “the large financial institutions de-camp to the rest of the UK and Scotland’s financial system becomes dominated by non-Scottish institutions” (2014).

## **TRANSFERRING A SCOTTISH SHARE OF UK DEBT**

There has been much debate over the circumstances in which an independent Scotland would be obliged to take a share of UK debt and the implications of it not taking on a Scottish share. In January the UK Government announced that it would in all circumstances honour the debt it has issued in the event of Scottish independence (2014d). The Scottish Government states in [Scotland’s Future](#) that an independent Scotland will take on a share of the UK’s national debt, and be entitled to a corresponding share of assets. However, following on from the UK Chancellor George Osborne ruling out a formal monetary union between an independent Scotland and rUK, John Swinney, the Cabinet Secretary for Finance, Employment and Sustainable Growth stated to the Economy, Energy & Tourism Committee:

“If we follow to its logical conclusion the Treasury’s argument—that the United Kingdom would be the continuing state and as a consequence would in essence have exclusive access to the role and responsibilities of the Bank of England and the sterling currency—the United Kingdom will assume the entire responsibility for the liabilities of the United Kingdom. To quantify that, that would mean that the United Kingdom would take on an additional share of debt, which could be supported by an independent Scotland, of up to £130 billion” (Scottish Parliament 2014).

However, a number of economists have warned about the dangers of an independent Scotland not taking on its share of UK debt. For example, Professor David Bell stated:

“One of the first actions of an independent Scotland will be to go to the markets to raise cash. It will also want to keep interest charges as low as possible. For this, it will need a good credit rating. And the markets might be wary of a borrower that would not take a share of UK debt” ([2014](#)).

In response to these concerns, the Cabinet Secretary John Swinney has argued that Scotland cannot ‘default’ on its debt because it is the UK that legally owes the money. Christine Bell ([2014](#)) from Edinburgh University agreed that Scotland refusing its debt would not count as default. She adds that “it can be argued that international law does, however, contemplate that on dividing, the two resulting states share out assets and liabilities equitably.”

Chief Secretary to the Treasury Danny Alexander highlighted the estimates by investment bank Jefferies International showing that international markets would treat a refusal to take on any UK debt as default and this would increase the cost of Scottish borrowing with a premium of five percentage points ([Bloomberg News](#) 2014).

Another issue relating to the transfer of a Scottish share of UK debt would be how the debt is divided and the method in which it is transferred. In Scotland’s Future the Scottish Government propose that Scotland could take on a population share of the debt or that the share could be calculated by reference to the historic contribution made to the UK’s public finances by Scotland (2013f). [Armstrong & Ebell](#) (2014) assume that a population based share of gross debt would be the basis for negotiation as it is the most common international measure.

It is also outlined in [Scotland’s Future](#) that “the Scottish Government does not envisage that a proportion of UK debt would be legally transferred to Scotland on independence” (Scottish Government 2013f). Under this scenario Scotland would cover its share of the costs of servicing the agreed level of debt at UK interest rates. Alternatively, the Scottish Government could issue a large amount of bonds to repay its share of existing UK public debt. Another method of transfer could be an assets-for-debt swap (oil and gas reserves for public debt) ([Armstrong & Ebell](#) 2014).

Whichever method of debt transfer that might be agreed, [Armstrong & Ebell](#) argue that the greater the amount of public UK debt an independent Scotland assumes, the greater the importance of retaining some policy flexibility and the stronger the case for introducing a new Scottish currency (2013).

## **SOVEREIGN BORROWING COSTS**

A Government needs to borrow as the inflows from taxation do not always match the outflows on public expenditure. Current trends mean it is possible that an independent Scottish Government will initially have a fiscal deficit – although this may change – with the gap filled by borrowing. In addition, the Scottish Government will likely have its share of UK national debt to service. The mechanism through which debt is transferred will determine the extent to which Scotland will manage debt servicing costs directly. For example, the mechanism proposed by the FCWG would involve a transition whereby Scotland pays rUK debt servicing costs until Scotland’s share of debt matures, at which point it is refinanced by the Scottish Government. Once the inherited debt is refinanced, Scotland would be responsible for managing all debt service costs directly. Another option is for Scotland to immediately issue new bonds to take on its full share of UK debt. Under any scenario, Scottish borrowing costs would only apply to new debt issued by the Scottish Government.

Many Governments borrow through issuing bonds. Interest rates on these bonds are determined through the markets. On 19 February 2014 the UK Government said that it would let Scotland sell bonds on international markets starting in 2015 ([Bloomberg News](#) 2014). A key contributor to determining interest rates is the rating given to a country by reputable private credit rating agencies (CRAs).

[Armstrong & Ebell](#) consider different sources of bond yield spread (such as the debt-GDP ratio, the deficit-GDP ratio, liquidity and tax volatility) which capture the country's ability and willingness to repay its debts. They estimate a model of sovereign yield spreads for countries that share the same currency and apply the parameters to Scotland to generate a hypothetical sovereign yield spread. By doing this, they estimate that the cost of Scottish Government borrowing in the scenario where it is independent but in a formal monetary union with rUK may carry a risk premium of between 72 and 165 basis points:

“We estimate that an independent Scotland within a sterling currency zone would face long-run average borrowing costs of between 72 and 165 basis points over UK borrowing costs. There is greater statistical precision over the upper bound estimate. Added to the UK average ten year bond yield between 2000 and 2012 suggests borrowing costs would have been between 4.82% and 5.75%”.

However, Standard & Poor's, one of the world's leading CRAs still notes that ([2014](#)):

“The macroeconomic profile of the wealthy and open Scottish economy conforms with the typical profile of sovereigns rated in investment-grade categories (i.e., 'BBB-' or higher).”

An independent Scottish Government might be able to reduce any risk premium through demonstration of strict fiscal discipline. As part of this, it may wish to set up its own version of the UK's Debt Management Office to increase its credibility.

## UNKNOWNNS

The numerous unknowns if Scotland becomes independent make it difficult to assess what currency arrangement would suit it best and what the consequences of this would be in terms of borrowing costs for example. These include:

- The share of assets and liabilities that an independent Scotland would have, including:
  - North Sea oil and gas reserves
  - Foreign reserves
  - Public sector debt
  - Bank of England special notes that back the current issuance of Scottish notes to the Scottish central bank
- Whether or not the UK Government stands by its current position on a sterling union
- How Scotland would be represented in the Bank of England in a sterling union
- Whether or not Scotland remains in the EU and the conditions attached

As noted by the [Scottish Government](#) (2013d), many of the discussions around these issues may not take place until after the referendum.

## CASE STUDY – THE IRISH EXAMPLE

1826: Assimilation of Irish pound with pound sterling.

1922: Irish Free State established. It was widely accepted that a careful preliminary review was essential before legislation on a new currency could be framed.

1926: Appointment of a Banking Commission to look into the currency of the Irish Free State. Its recommendation was that, while it was desirable for the State to establish its own currency system, this might best be done through the adoption of a fixed relationship to pound sterling. Extensive trading and financial relations with the UK underpinned this decision. It decided against the establishment of a central bank. Instead, it recommended that responsibility for banknote issue should be given to a non-political independent Currency Commission.

1927: The Currency Act provided for a new unit of value, to be known as the Saorstát pound, which would be maintained at parity with the pound sterling. This was underpinned by a guarantee that Irish banknotes would be paid at par in sterling (without fee, margin or commission) at the Bank of England.

1934: The Commission of Inquiry into Banking, Currency and Credit was established and reported in 1938, recommending that Ireland “hasten slowly” towards setting up a central bank. With regard to the currency, maintaining the link with sterling was regarded as fundamental and the existing one-for-one parity was considered to be appropriate.

1943: The Central Bank Act 1942 came into effect and the Currency Commission became a central bank with responsibility for “safeguarding the integrity of the currency”.

1970s: A number of related developments, such as rapidly rising UK inflation, a fall in trade with the UK and attempts to establish a common European currency, led to a questioning of the appropriateness of continuing the fixed parity link with the pound sterling. Moves towards establishing a money market in Dublin, the transfer by the commercial banks of their sterling assets to the Central Bank in 1968 and the extended powers provided in the Central Bank Act, 1971 made it possible to contemplate a more independent exchange rate policy for the Irish pound.

1978: Parallel to the questioning of the sterling link in Ireland, discussions on closer exchange rate arrangements were progressing in Europe. In April 1978, the European Council in Copenhagen decided in principle on the creation of a “zone of monetary stability” in Europe. On 15 December 1978, the Taoiseach announced the Government’s decision that Ireland would participate in the European Monetary System (EMS). The factors, which influenced this decision, were: (i) the inappropriateness of an indefinite prolongation of the sterling link; (ii) the benefits in terms of a reduction in inflation to be obtained from adherence to a hard currency regime; (iii) a commitment to a major Community initiative; and (iv) Community support in the form of resource transfers. It was recognised that EMS membership would probably entail a break in the link with sterling at some stage and this happened in 1979, over fifty years after its formal adoption.

1999: The Euro became the currency of Ireland and the ten other Member States joining the European Monetary Union (EMU). To get to this stage, it was necessary to decide on the level at which the Irish pound’s exchange rate would be irrevocably fixed against other member currencies, monetary policy instruments in Ireland had to be brought into line with those proposed for EMU Member States and changes to national legislation were necessary.

Source: [Central Bank of Ireland](#) 2003

## ANNEX 1 - THE HISTORY OF POUND STERLING

The Acts of Union, passed by the English and Scottish Parliaments in 1707, led to the creation of the United Kingdom of Great Britain. At this time, there was a Scottish pound and an English pound (pound Sterling) and the rate of exchange was fixed at 12 Scottish pounds to one pound sterling. Almost a hundred years later, in 1805, the rate of exchange was fixed at par and the Scottish pound was replaced by the pound sterling (Murkens et al 2002).

The pound sterling dominated world trade under the gold standard of the late 19th and early 20th century. Under the gold standard each nation had to back its banknotes with the equivalent in gold. Exchange rates were fixed and capital flowed freely internationally. Domestic monetary policy came second to the demands of the gold standard, except during extreme crisis. Indeed, the UK suspended the gold standard in 1914 as a result of the First World War, but re-instated it in 1925 at the rate that had been set in the 18<sup>th</sup> century of £4.86 to the dollar. However, this was viewed as an over-valuation, and continued strengthening of the dollar combined with economic instability in the UK led to a run on sterling in 1931, ending its involvement in the gold standard. The pound became free-floating until 1939 and the start of the Second World War, when it became pegged to the US dollar.

The Bretton Woods conference in 1944 signalled the end of sterling as the world's most dominant currency. Although both the dollar and the pound Sterling were defined as reserve currencies, pound sterling's importance as a reserve currency was to subsequently decline. Under the Bretton Woods system pound sterling continued to be pegged to the US dollar. Member countries had a formal commitment to fixed but adjustable exchange rates, and capital accounts were largely closed to give members the flexibility to operate independent monetary policies. The continued weakening of pound Sterling against the strengthening dollar led to its devaluation in 1949 and 1967. However, long-term economic decline continued in the UK. The latter devaluation of the pound and subsequent devaluation of the dollar after the Vietnam War led to the breakdown of the Bretton Woods system in 1971.

Immediately afterwards, the pound sterling floated. But the breakdown of the Bretton Woods system led to another development across Europe. In 1972 the UK agreed to maintain stable exchange rates with three other major European currencies (the deutschemark, the French franc and the Italian lira). However, economic problems meant that pound sterling dropped out after only six weeks and became free-floating again. High inflation and continued economic collapse through the 1970s led to the pound falling below \$2 for the first time. Through this period a number of currencies broke their link with the pound sterling, e.g. Ireland and Hong Kong.

In the late 1980s, the UK again looked towards currency stabilisation with Europe and the pound Sterling was capped against the deutschemark. The arrangement did not last because Europe was growing more slowly than the UK and capital inflow led to a rise in the value of sterling and high inflation. The UK joined the European exchange rate mechanism in 1990, but again withdrew shortly afterwards when the system became strained by the differing economic performance and policies of its members ([The Telegraph](#) 2001). Since then, the pound sterling has been free-floating.

Pound sterling is currently the fourth most traded currency in the world, after the dollar, the euro and the Japanese yen ([Bank for International Settlements](#) 2013). The effective exchange rate index shows that since the advent of the financial crisis, the pound has lost value relative to a basket of other currencies ([Bank of England](#) 2014a).

## ANNEX 2 – EXCHANGE RATE ARRANGEMENTS

### *Fixed exchange rates*

Under a fixed exchange rate arrangement, such as the Bretton Woods system, one currency is redeemable at a fixed rate for a given commodity, e.g., gold or a “reserve” currency. One way of maintaining fixed exchange rates are currency boards. These monetary authorities manage exchange rates using monetary and fiscal policy<sup>20</sup>. The exchange rate target supersedes any other objectives of the central bank. This type of arrangement can be beneficial for trade as it reduces the risk that currencies will change in value relative to one another (less exchange risk). Where one currency is fixed to another, there is still the possibility of devaluing or revaluing the currency.

### *Floating exchange rates*

In a floating exchange rate system, such as with the dollar or the pound, the currency value is determined by ‘market forces’ and is out of the control of the Government. Theoretically flexible exchange rates allow a country to adjust to an exogenous shock without creating inflation or unemployment. Currencies appreciate or depreciate relative to one another based on laws of supply and demand. In a perfect market this would mean that the value of money perfectly reflects its use. Thus a country undergoing an economic downturn would see its currency depreciate as demand for that currency would decrease, thus making its exports cheaper and more competitive.

Although floating exchange rates give currency risk which can damage trade, their major advantage is that central banks no longer need to hold large reserves and can engage in exceptional measures such as quantitative easing. Being able to provide liquidity (i.e. print money) also allows the central bank to function as an effective lender of last resort for the financial sector. The credibility of a central bank, its declarations and the nature of the reserves it holds play a crucial role in the value of the currency.

### *Pegged exchange rates*

A pegged exchange rate system is a hybrid of the fixed and floating exchange rate regimes. A target exchange rate is usually set and the actual exchange rate is allowed to fluctuate in a range around that initial target rate. Maintaining a currency peg requires that the central bank holds large reserves as it is constantly buying or selling the domestic currency in order to manage the value of the currency. The target exchange rate may be modified e.g. to restore competitiveness through devaluation. A nation will typically peg its currency to a major currency or to a basket of currencies. The choice of currency (or basket of currencies) depends on the currencies in which the country’s external debt is denominated and the extent to which a country’s trade is concentrated with particular trading partners (or done in a particular currency or basket of currencies e.g. oil is mainly traded in US dollars). The case for pegging to a single currency is strongest if the peg is to the currency of the principal trading partner as it reduces currency risk.

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<sup>20</sup> For example, if demand for a country’s exports increases, the value of its currency increases as more people are using it to pay for that country’s products and services. This makes the currency more valuable. In order to maintain the exchange rate, the government would have to reduce the attractiveness of its products e.g. encouraging inflation, by decreasing interest rates and/or increasing the supply of money.

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