

DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

Targeted longer-term refinancing operations (TLTROs): Will they revitalise credit in the euro area?

IN-DEPTH ANALYSIS

Abstract

In recent months, the ECB has taken several steps to revitalise credit. In June, it decided to offer banks targeted longer-term refinancing operations (TLTROs), and in September, it announced its intention to buy large (as yet unspecified) amounts of asset-backed securities (ABS), also with the aim of improving the financing conditions for investment, especially for small and medium enterprises (SMEs). However, this focus on bank balance sheets as an inhibitor of lending might be misplaced. Surveys indicate that lending is falling at present because demand for credit is very weak, while the supply constraints from the side of the banks are disappearing. This is definitely the case for the core countries and increasingly so for those in the periphery (whose share in lending is still higher than at the start of EMU).

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

AUTHOR

Daniel GROS, with Cinzia ALCIDI and Alessandro GIOVANNINI, CEPS, Brussels

RESPONSIBLE ADMINISTRATOR

Dario PATERNOSTER
Policy Department A: Economic and Scientific Policy
European Parliament
B-1047 Brussels
E-mail: Poldep-Economy-Science@ep.europa.eu

LINGUISTIC VERSIONS

Original: EN

ABOUT THE EDITOR

Policy departments provide in-house and external expertise to support EP committees and other parliamentary bodies in shaping legislation and exercising democratic scrutiny over EU internal policies.

To contact the Policy Department or to subscribe to its newsletter please write to:
Poldep-Economy-Science@ep.europa.eu

Manuscript completed in September 2014
@ European Union, 2014

This document is available on the Internet at:
<http://www.europarl.europa.eu/studies>

DISCLAIMER

The opinions expressed in this document are the sole responsibility of the author and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

CONTENTS

LIST OF ABBREVIATIONS	4
EXECUTIVE SUMMARY	6
1. INTRODUCTION	7
2. THE BROAD VIEW: CENTRAL BANK BALANCE SHEET AND LENDING	8
3. THE OBJECTIVE OF THE TLTRO: REVITALISE LENDING	9
4. THE EXPERIENCE OF THE FUNDING FOR LENDING SCHEME IN THE UNITED KINGDOM	10
5. CREDIT DEMAND, SUPPLY AND CREDIT RATIONING	14
5.1. Credit supply problems or weak demand?	16
5.2. Core versus periphery	17
5.3. Credit rationing under structural change	18
6. CONCLUSIONS	19
REFERENCES	20
ANNEX: NOTE ON ABS PURCHASES	21

LIST OF ABBREVIATIONS

ABS Asset-Backed Securities

ABSSPP Asset-Backed Securities Purchase Programme

BLS Bank Lending Survey

BoE Bank of England

CBPP Covered Bond Purchase Programme

ECB European Central Bank

EMU Economic and Monetary Union

FLS Funding for Lending Scheme

PNFC Private Non-Financial Corporations

SAFE Survey on the Access to Finance of Small and Medium-Sized Enterprises

SMEs Small and Medium-Sized Enterprises

LTRO Long-Term Refinancing Operation

TLTRO Targeted Longer-Term Refinancing Operation

LIST OF FIGURES

Figure 1:	European Central Bank Balance Sheet (billions of euro)	8
Figure 2:	Fund for Lending Scheme: lending and drawings (pound sterling)	10
Figure 3:	Changes since 2012 Q2 in credit spread indicator	11
Figure 4:	Change in projections and outturns for net lending to households and PNFCs (2012 Q2–2013 Q4)	12
Figure 5:	Change in % between 2013 and 2014 of Italian and Spanish firms who see access to finance as their most pressing problem	14
Figure 6:	Contributing factors to tightening/easing of credit standards and in Spain and Italy	15
Figure 7:	Demand and supply conditions	16

LIST OF TABLES

Table 1:	Outstanding amounts by collateral and country, 2013:Q4 (billion euros)	21
----------	--	----

EXECUTIVE SUMMARY

Will the measures taken by the ECB in June and September be enough to revitalise credit?

We argue that neither the targeted longer-term refinancing operations (TLTROs), nor purchases of Asset Backed Securities (ABS) are likely to have a large impact on lending. The standard surveys of loan officers suggest that credit standards are normalising quickly. Weak credit demand is likely to be a more important determinant of actual lending.

The experience of the 'Funding for Lending' scheme in the UK suggests that the TLTRO might also have a marginal impact on lending volumes although the ECB's approach does not penalise banks which do not increase lending (as done in the UK). However, a focus on lending volumes appears misguided. Larger enterprises might just substitute from other forms of credit and even SMEs might be induced by their banks to substitute outright lending for letters of credit, bank guarantees, etc. It is difficult to target the use of central bank funding as money is inherently fungible and can take many different forms.

There are of course still important differences in the credit supply conditions between the core and the periphery. In the periphery lending has fallen considerably. But the issue for policy is whether this represents part of a necessary deleveraging process (bank lending remains higher than in 2007 in both core and periphery) or a destructive credit crunch. What is more surprising is that lending in the core countries (which account for 60% of total lending) is not growing despite zero interest rates and very easy credit conditions. This suggests that the problem is not one of credit supply, but of weak demand from the economy.

Moreover, in times of structural changes the classic Stiglitz-Weiss problem of asymmetric information between borrowers and the banks becomes more acute, leading banks to distrust credit applications, which they have difficulty judging under changed conditions. Increasing the availability of equity capital would be much more important than providing an implicit subsidy to bank lending when there is wide agreement that the euro area's financial system is anyway too bank centric and its banking sector is too large.

1. INTRODUCTION

On 5 June 2014, the European Central Bank (ECB) announced measures to improve the functioning of the transmission mechanism of monetary policy by supporting the process of bank lending to the real economy. In particular, the Governing Council decided (unanimously) to conduct, for a period of two years, a series of targeted longer-term refinancing operations (TLTROs) to increase the flow of financing to the private sector.

This decision was accompanied by the adoption of other measures. First, a reduction in the official rate of financing from 0.25% to 0.15%, which was further reduced in September 2014 to 0.05%, and a reduction in the marginal refinancing rate (i.e. the maximum rate applied in refinancing operations to meet the full demand) from 0.75% to 0.40%, which was subsequently reduced to 0.30%.

Other parts of the package included non-standard monetary policy measures:

- a negative interest rate on overnight deposits, for the first time in ECB history (or that of any major central bank): initially set to -0.10%, this rate was reduced in September to -0.20%;
- the continuation of refinancing operations at a fixed rate and full allotment until at least the end of 2016; and
- the suspension of sterilisation of the liquidity injected in the last years through purchases of securities under the Securities Market Programme (remaining amount: EUR 170 billion).

Overall, the package of policies announced in June encompassed all the measures that had been widely discussed previously and were specifically designed to inject substantial amounts of liquidity into the system. The final goal of these conventional and unconventional measures is to bring inflation closer to the target of 2% by reactivating the normal transmission mechanism of monetary impulses to the economy. In this way, it is hoped that inflation expectations can be more effectively managed.

The deterioration of inflationary expectations (and a declining actual inflation) over the summer led the ECB to take further measures in September, such as an additional lowering of its key interest rates (including the above mentioned reduction of rate on overnight deposits to -0.20%). The real novelty of the decision in September (which was not unanimous) was to start the direct purchase of a broad portfolio of asset-backed securities (ABSs) under an ABS purchase programme (ABSPP)¹ and of euro-denominated covered bonds issued by MFIs domiciled in the euro area under a new covered bond purchase programme (CBPP3).

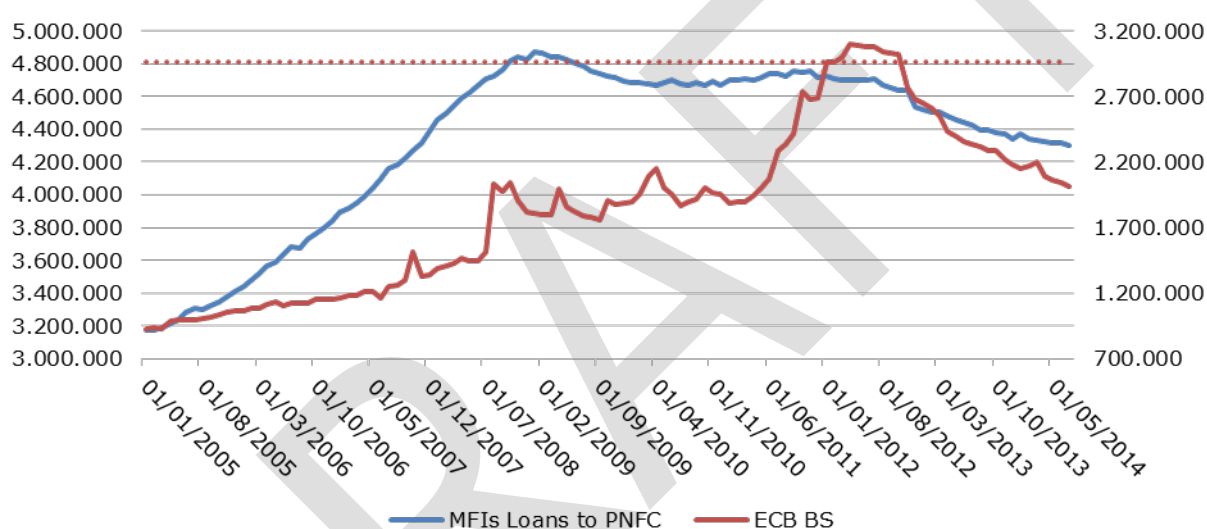
This note first looks into the general link between the size of the ECB's balance sheet and bank lending (Section 2). Then, in Section 3, it describes the main features of the TLTRO, focussing on the channel through which liquidity will be injected into the system, and how it differs from the previous Long-Term Refinancing Operations (LTRO). Section 4 looks at a similar instrument activated by another Central Bank to induce a larger flow of credit to the private sector, namely the Funding for Lending Scheme (FLS) activated by the Bank of England in 2012. Section 5 addresses the broader issue of whether supply constraints or a lack of demand is holding bank lending and critically assesses whether this strategy could really solve the problem of credit in the euro area. Section 6 provides policy conclusions.

¹ Although this note does not specifically address the issue of ABS purchase, it is worth mentioning the main problem that could make the programme fail to achieve the objective of revitalising the ABS market. The ECB is already the dominant player in this market, as the ABS used as collateral to obtain loans (from the ECB) accounted for 70% of the €114.3 billion of total ABS issuance in the first half of 2014. For more details on the structure see: www.ft.com/intl/cms/s/0/c491b5ea-3813-11e4-b69d-00144feabdc0.html?siteedition=intl#axzz3CvR0JBWu.

2. THE BROAD VIEW: CENTRAL BANK BALANCE SHEET AND LENDING

The June and September initiatives of the ECB were designed to ease credit conditions as the fear arose that the shrinking of the ECB's balance sheet over the preceding months might have had a tightening impact. Banks had been progressively repaying the funding they had received since late 2011 under the two rounds of the so-called LTRO². As a result, the total assets on the balance sheet of the ECB fell by more than EUR 1 billion between the summer of 2012 and May 2014 (see Figure 1). By contrast, the balance sheets of other major central banks in advanced western economies have continued to increase over this period. The goal, as explicitly expressed by ECB President Mario Draghi,³ is to steer the size of the ECB balance sheet towards the dimensions it had at the beginning of 2012 (dotted bar of Figure 1).

Figure 1: European Central Bank Balance Sheet (billions of euro)



Source: Authors' calculations based on European Central Bank data, 2014.

Figure 1 suggests that there is little correlation between the evolution of the ECB's balance sheet and that of the credit markets, especially with respect to credit to private non-financial corporations (PNFCs). The TLTRO is intended to increase this correlation, as the funds that banks borrow from the ECB should be used to effectively increase credit to the economy. This is a first point to keep in mind. While in normal times, before the financial crisis, for example, there was some positive correlation between the balance of the ECB and bank lending, this relationship broke down in 2010.

² For an analysis of the actions undertaken by the ECB in the period 2010-2012 see: Gros, D., Alcidi, C. et Giovanni, A. (2012), "Central Banks in Times of Crisis: The FED vs. the ECB", CEPS Policy Briefs: <http://ceps.be/book/central-banks-times-crisis-fed-vs-ecb>

³ M. Draghi (2014), "Introductory statement to the press conference (with Q&A)", Frankfurt am Main, 4 September 2014: www.ecb.europa.eu/press/pressconf/2014/html/is140904.en.html.

3. THE OBJECTIVE OF THE TLTRO: REVITALISE LENDING

On 5 June, the ECB announced the introduction of a series of refinancing operations, the TLTRO to increase the flow of financing to the private sector.

Under this scheme, euro area banks will initially be authorised to request financing equal to 7% of the amount of their loans to the non-financial private sector, excluding loans to households, as of 30 April 2014. The first two operations will be held on 18 September and 11 December. The potential supply of liquidity to banks has been estimated at EUR 400 billion (i.e. the 7% of the portfolio of loans to businesses and households, excluding housing loans). From March 2015 to June 2016 banks will be able to borrow additional resources in quarterly operations of the same type, with the same conditions. The possibility to access these TLTROs will depend on the evolution of the banks' eligible lending activities in excess of bank-specific benchmarks. All TLTROs will have a maturity of September 2018.

The rate paid is fixed for the duration of each operation and equal to that on ordinary operations (MRO) increased by 10 bps (0.15% under current conditions).

Cumulatively, these financing operations can reach an amount equal to three times the net increase of banks' loans, having as a base reference the average amount of loans outstanding during the period 30 April 2013 to 30 April 2014 (reference amount). For banks that exhibited negative eligible net lending in the year up to 30 April 2014, different benchmarks apply. These have been set by the ECB Governing Council as follows: the average monthly net lending of each bank in the year up to 30 April 2014 is extrapolated for 12 months until 30 April 2015. For the year from 30 April 2015 to 30 April 2016, the benchmark monthly net lending is set at zero.

In the case the loans granted by the bank⁴ are inferior to the reference amount as of 30 April 2016, the bank will be required to repay in advance the TLTRO in September 2016. The goal is to avoid, as in the 2011-2012 three-year LTROs, the banks using them simply to buy government bonds.

In this respect, it should be said that the incentive for banks to buy sovereign debt has changed since then, not least because of the drop in interest rates on government bond securities.

⁴ Not only single banks (or counterparties empowered to open market operations) can participate individually in TLTRO, but also groups of banks. In this case, a single counterparty 'leader' is enabled for open market operations, but the calculation of the TLTRO group's benchmark and borrowing allowances will be based on aggregated loan data for the TLTRO group. None of the participants of this group can take part in TLTRO as a single counterparty, nor can they be part of another group formed for participation in TLTRO. Moreover, the group should remain unchanged for all eight TLTRO and in the event of withdrawal from the group, this party will not take part in the future TLTRO, either as a single counterparty or as part of another group. The possibility of creating a group is enabled only for those financial institutions that demonstrate the pre-existence of "close links" (as defined by ECB regulation) with one of the other members of the group.

4. THE EXPERIENCE OF THE FUNDING FOR LENDING SCHEME IN THE UNITED KINGDOM

In the design of the TLTRO programme, the ECB has certainly looked at the recent experience Bank of England (BoE). In addition to the quantitative easing of about GBP 375 billion, in July 2012 the BoE launched the Funding for Lending Scheme (FLS), with the aim of pushing banks to increase their lending to businesses.

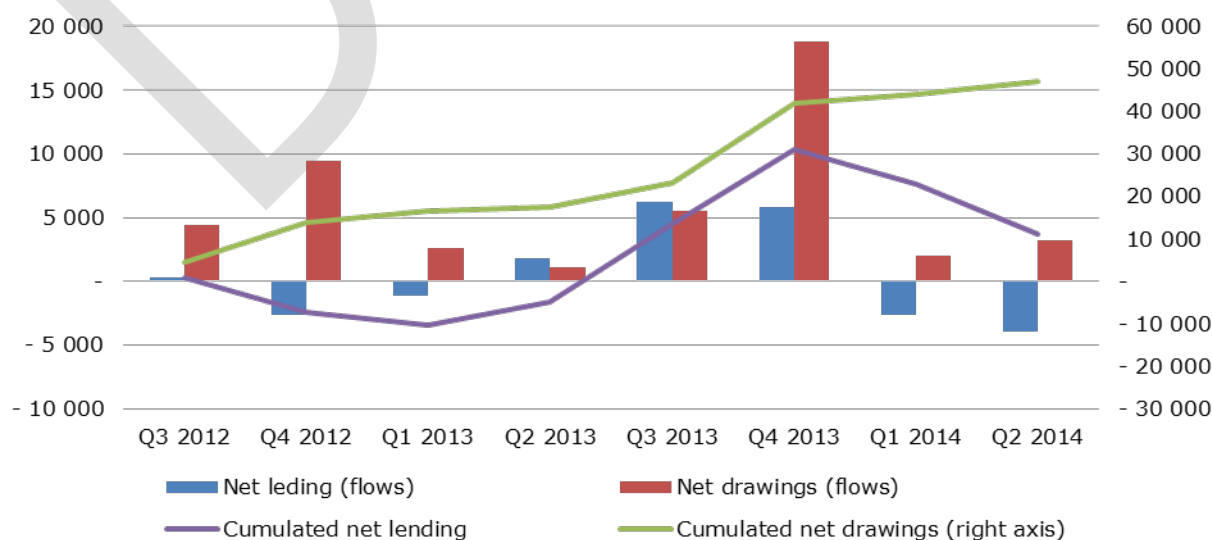
Similarly to the TLTRO, the FLS was designed to establish a link between central bank financing and the real economy. Banks could obtain from the BoE an amount equal to 5% of total loans to the non-financial sector. No maximum amount was fixed, but a definition of an adequate amount of collateral was defined.

Following the changing economic conditions, the BoE has subsequently made several changes to the FLS and in April 2013 decided to extend the programme until January 2015. Firstly, it decided to include non-bank credit providers among the institutions allowed to participate. Moreover, to target lending to small and medium-sized enterprises (SMEs), it allowed participants to draw GBP 5 in the scheme for every GBP 1 of net lending to SMEs. Finally, given the revival of the real estate market, from January 2014 the central bank has ruled that loans to households can no longer be counted in order to receive additional cash.

What was the result? British banks had, as of June 2014, more than GBP 45 billion of funds obtained through the FLS (green line of Figure 2). The take-up was thus limited and banks have not made full use of the programme, even to draw down up to 5% of their existing loans (IMF, 2013).

Against these drawings, from the programme's inception through 2013, participating banks have increased the net disbursements of credit to households and businesses by GBP 10 billion (violet line). From then through the second quarter of 2014, the stock of loans amounted to around GBP 4 billion, with a reduction of about GBP 6 billion in the net lending flows in the first two quarters of 2014. The correlation between the net lending and drawings is thus very low (around 0.5), and negative over the last part of the period, signalling that the funds obtained from banks in each period have not been automatically transformed into more lending.

Figure 2: Fund for Lending Scheme: lending and drawings (pound sterling)



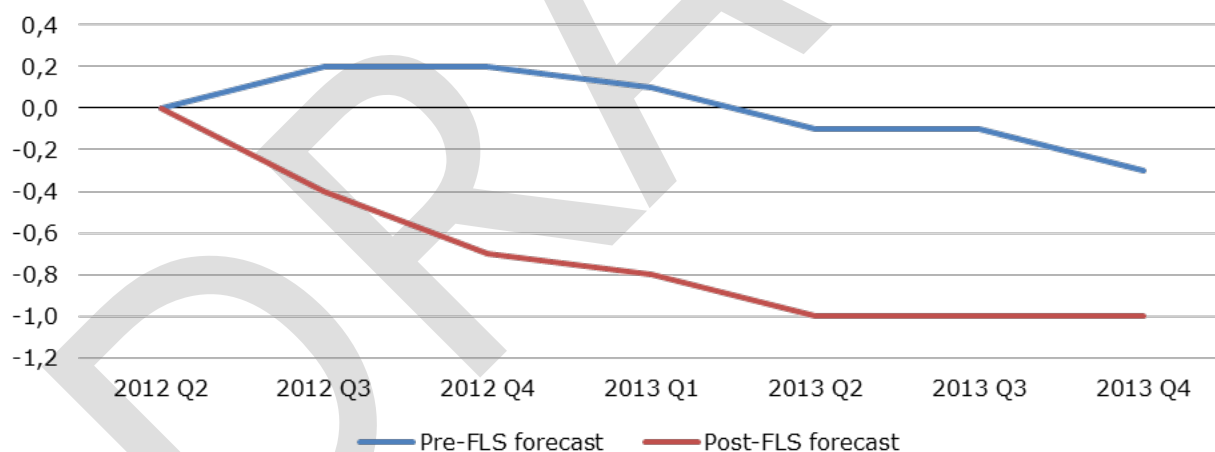
Source: Authors' calculations based on Bank of England, 2014.

Some commentators stressed that while the success of the programme was limited, the UK experienced a net increase in lending to the real economy, by contrast lending to the real economy fell in the euro area, and FLS drawings contributed about two-thirds of that increase (IMF, 2013).

Moreover, it has been argued that one should not judge the FLS simply by looking at the amount of additional lending, but also with respect to the counterfactual, i.e. the path of lending which would have taken place without it. This is not an easy task, as any development could also be explained by other factors, such as the improvement in euro area market conditions (deterioration of market conditions in the euro area was indeed responsible, in the year prior to the launch of the FLS, for the rise in UK banks' funding costs).

Analyses conducted by the BoE (admittedly an institution that had an interest in showing that the FLS was a success)⁵ show that the wholesale bank funding costs fell over the 18 months between the launch of the FLS and the end of 2013, and many lenders drew funding from the scheme. That was associated with a fall in borrowing rates and credit spreads for households and corporates, which substantially eased the availability of credit in the economy compared to what had been forecasted before the FLS was launched. Figure 3 compares the pre-FLS forecasts (blue line), based on data up to the time of the scheme's announcement, with the post-FLS forecasts that take into consideration the projected impact of the scheme (orange line) and illustrate an important improvement in the funding cost of the post-FLS forecast.

Figure 3: Changes since 2012 Q2 in credit spread indicator



Note: Credit spread is defined as the difference between the borrowing rates and an appropriate risk free rate. For the methodology see page 16-17 in

www.bankofengland.co.uk/publications/Documents/inflationreport/2014/ir14feb.pdf

Source: Authors' calculations based on 2014 data from the Bank of England.

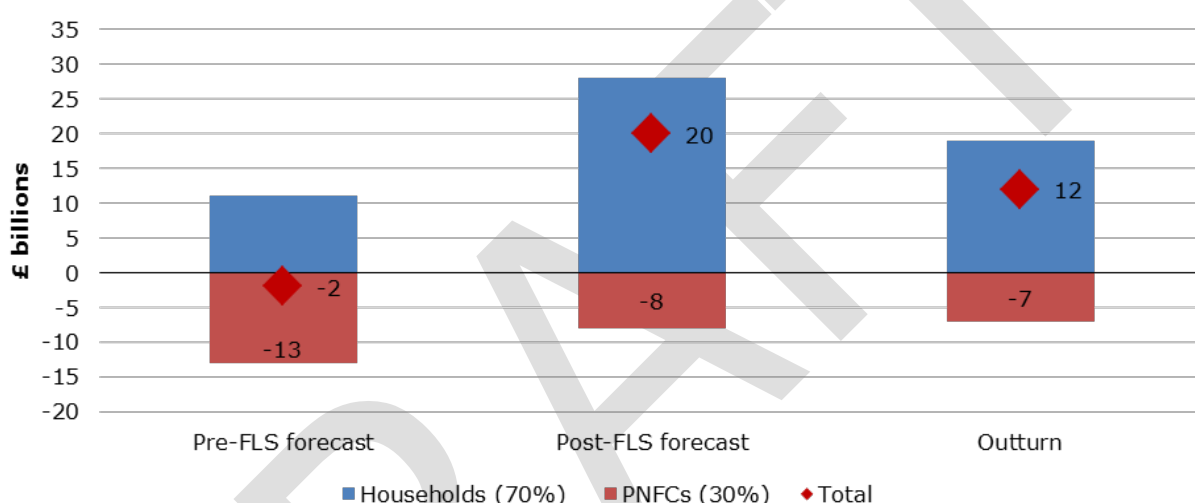
A comparison of forecasts (prior to the FLS) for lending volumes to actual outcomes (after the FLS) also suggests that the FLS did have a substantial impact. Figure 4 illustrates how the loosening of credit conditions resulted in an increase in net lending to the real economy in the period between 2012 Q2 and 2013 Q4 by around GBP 12 billion (instead of an expected fall in lending ahead of the introduction of the FLS). The impact, however, was

⁵ An informative box outlining developments in credit conditions since the launch of the FLS can be found on pp. 14-15 of the May 2014 Bank of England Inflation Report: www.bankofengland.co.uk/publications/Pages/inflationreport/2014/ir1402.aspx.

diversified among households and firms. In fact, within that increase, household net lending picked up around GBP 19 billion (although this was lower than the expected GBP 28 billion), while the contraction in the stock of loans to PNFCs of around GBP 7 billion was lower than the expected GBP 8 billion, ahead of the FLS.

In interpreting these figures one should take into account that SMEs need not only credit but also credit lines, letters of credit and bank guarantees for projects which have a longer time span. These other forms of financing are often more important for SMEs than the size of the loan they have actually drawn. It remains to be seen whether banks have simply encouraged SMEs to draw down available credit lines or take out a loan to finance a bank guarantee. Volumes of lending are not a sufficient statistic for the availability of credit when the central bank subsidises one form of financing.

Figure 4: Change in projections and outturns for net lending to households and PNFCs (2012 Q2–2013 Q4)



Source: Authors' calculations based on 2014 data from the Bank of England.

It is important to underline how the FLS was not only expected to exert an impact on the amount of funding, but also on its cost. While banks that increased or maintained their lending to businesses and households obtained rates of 0.25%, banks whose lending volumes fell had to pay penalty rates. Banks experiencing a fall in lending volumes of less than 5% would have to pay 25 basis points more for every percentage point decrease; for declines in excess of 5%, the maximum interest rate was determined to be 1.5%.

The effective interest rates for the SMEs have not been affected much by the FLS, remaining slightly above 3%. Despite a reduction by 200 basis points in the funding costs, the rates on fixed-rate mortgages decreased only by around a percentage point between mid-2012 and the end of 2013.

Survey-based measures suggest that credit conditions are now quite favourable in the UK. The 2014 Q2 Deloitte CFO Survey reports answers from large companies on whether credit is available and expensive:⁶ the credit availability is close to the highest level in seven years and the cost of credit has fallen to a seven-year low. Similarly, the Voice of Small Business Index⁷ (compiled by the Federation of Small Businesses) reported that loan

⁶ See www.deloitte.com/assets/Dcom-UnitedKingdom/Local%20Assets/Documents/Research/CFO%20Survey/uk-insights-cfo-survey-2014-q2-full-report.pdf.

⁷ See www.fsb.org.uk/small-business-index.

application success rates continued to increase in 2014 Q2, and that the rates offered to successful businesses have again fallen over the past year. However, it is questionable whether this can be attributed to the FLS because a similar development has taken place in the euro area as documented below.

It is thus difficult to arrive at an overall judgement of the FLS in the UK. Credit growth remains anaemic, but surveys indicate that it is plentiful and cheap and that without the FLS lending might have been even weaker. The subsequent sections on the euro area suggest that the ECB might encounter similar issues.

DRAFT

5. CREDIT DEMAND, SUPPLY AND CREDIT RATIONING

It is often argued that the main problem inhibiting a recovery in the euro area periphery is that banks are not lending, especially not to SMEs. For some time it was argued that banks in countries such as Italy and Spain were not lending because their refinancing costs were too high (due to the bank-sovereign nexus) and because their capital base was too low. However, both arguments are no longer valid, as refinancing costs have converged and the capital base has been strengthened.

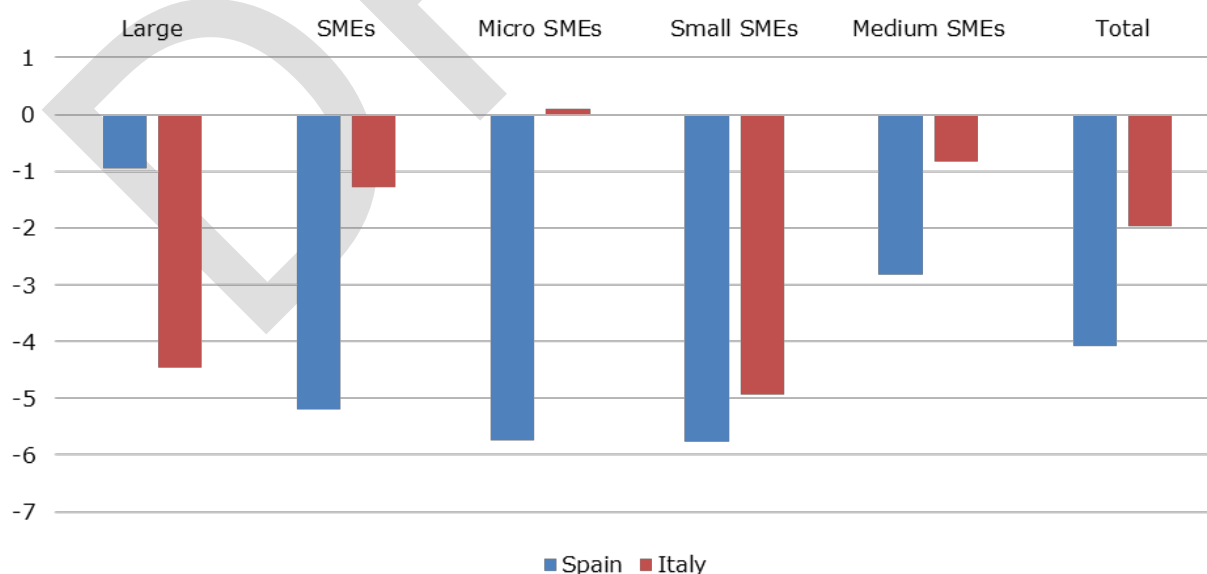
The TLRO is expressly designed to address the issue of insufficient lending and is driven by the intent to lower the funding cost of banks and trigger a virtuous circle of greater credit provision to the economy.

The view that supply-side problems are no longer so paramount is confirmed by looking at the published results of the most recent round (October 2013-March 2014) of the biannual Survey on the Access to Finance of Small and Medium-sized Enterprises (SAFE), which involved 7,520 firms.

The percentage of SMEs reporting access to finance as their main problem is low (declining to 14% from 16% in the preceding round) and the percentage of those that reported a deterioration in the availability of bank loans was even lower (-4% of respondents, in net terms, up from -11%). Moreover, the survey results indicate a marginal decline in the rejection rate for euro area SMEs applying for a loan (11%, down from 12%).

Also by looking at the country differences, the picture does not change significantly. Even in peripheral countries the availability of credit seems to be improving compared to the previous period. Figure 5 shows how both in Italy and Spain the percentage of firms that see access to finance as their most pressing problem has declined for all types of firms since the April-September 2013 SAFE survey round.

Figure 5: Change in % between 2013 and 2014 of Italian and Spanish firms who see access to finance as their most pressing problem

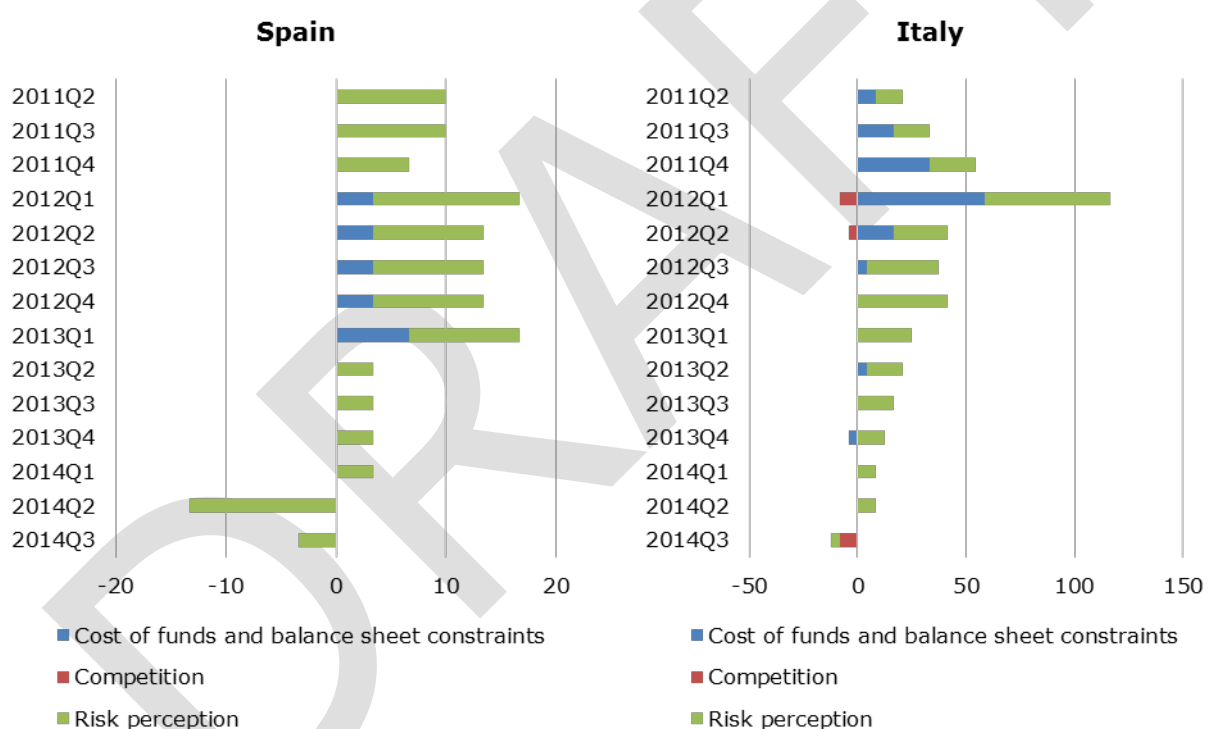


Source: Authors' calculations based on 2014 data from the European Central Bank.

Given the developments emerging from these data and the recent general decline in risk spreads, attention has shifted towards a potential lack of demand. Many banks in Italy and Spain report that they would be willing to lend, but demand, or rather qualified demand for credit, from the SME sector is very weak.

This view is confirmed also by the data of another ECB survey, the Bank Lending Survey (BLS). This is addressed to senior loan officers of a representative sample of 137 euro area banks. Figure 6 shows how both in Italy and Spain, for the first time since the second quarter of 2007, banks reported a net easing of credit standards on loans to enterprises, in the second quarter of 2014 (confirming the picture emerging from SAFE). More interestingly, it emerges how the main factors behind the developments in tightening/easing of credit standards are not banks' cost of funds and balance sheet constraints (which had been very relevant in 2011/2012), but banks' risk perceptions in terms of firms' business outlook and macroeconomic uncertainty.

Figure 6: Contributing factors to tightening/easing of credit standards and in Spain and Italy



Note: The net percentages for responses to questions related to the factors are defined as the difference between the percentage of banks reporting that the given factor contributed to a tightening and the percentage reporting that it contributed to an easing. "Cost of funds and balance sheet constraints" is calculated as the un-weighted average of "capital position", "access to market financing" and liquidity position". "Risk perception" is calculated as the un-weighted average of "expectations regarding general economic activity", "industry-specific risk" and "risk on collateral demanded". "Competition" is calculated as the un-weighted average of "bank competition", "non-bank competition" and "competition by market financing".

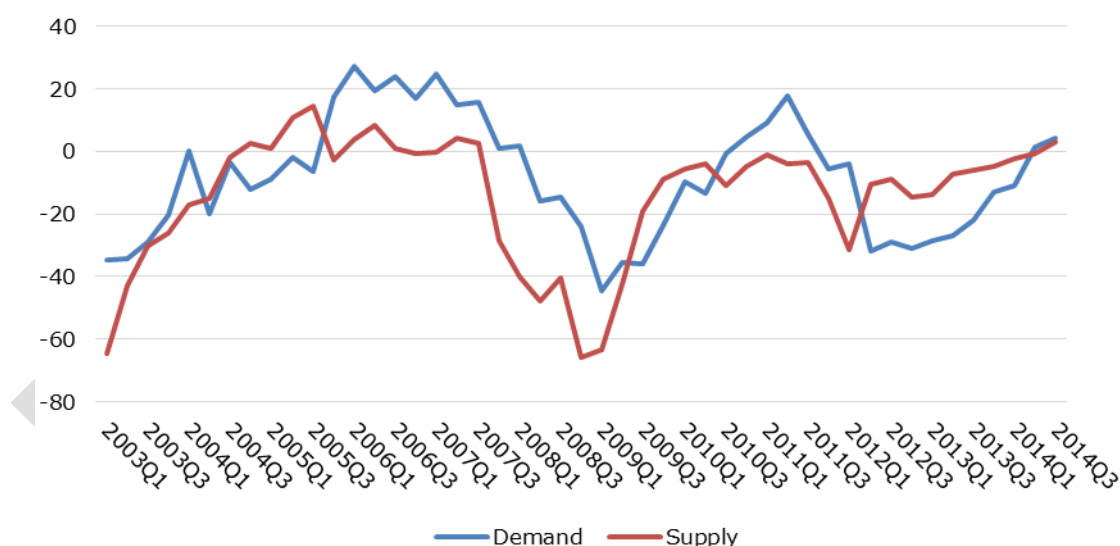
Source: Authors' calculations based on 2014 data from the European Central Bank.

5.1. Credit supply problems or weak demand?

Further evidence of the importance of supply and demand constraints can be obtained from the BLS, by looking at whether respondents have recently tightened credit standards and whether they are encountering weaker credit demand.

Figure 7 below shows that these two factors tend to vary together. The orange line shows the difference between the percentage of respondents who eased and those who have tightened credit standards recently (a negative value means more are tightening). It is apparent that there was a spike in 2008/9 during the global financial crisis, which was followed (in part of the euro area) by a second spike when the euro area broke. However, the orange line is now at around the same level as between 2005 and 2007. Credit supply constraints are thus disappearing quickly. The blue line shows again the difference between the percentage of those encountering higher demand and the opposite (a negative number indicates a fall in credit demand relative to the previous period). It is apparent that both demand and supply conditions tend to deteriorate and improve together. This is not surprising: when the economy weakens the position of banks weakens as well (due to higher losses and less business). It is thus difficult to disentangle the two effects from each other. However, it is clear that both indicators are improving, at least for the euro zone average.

Figure 7: Demand and supply conditions



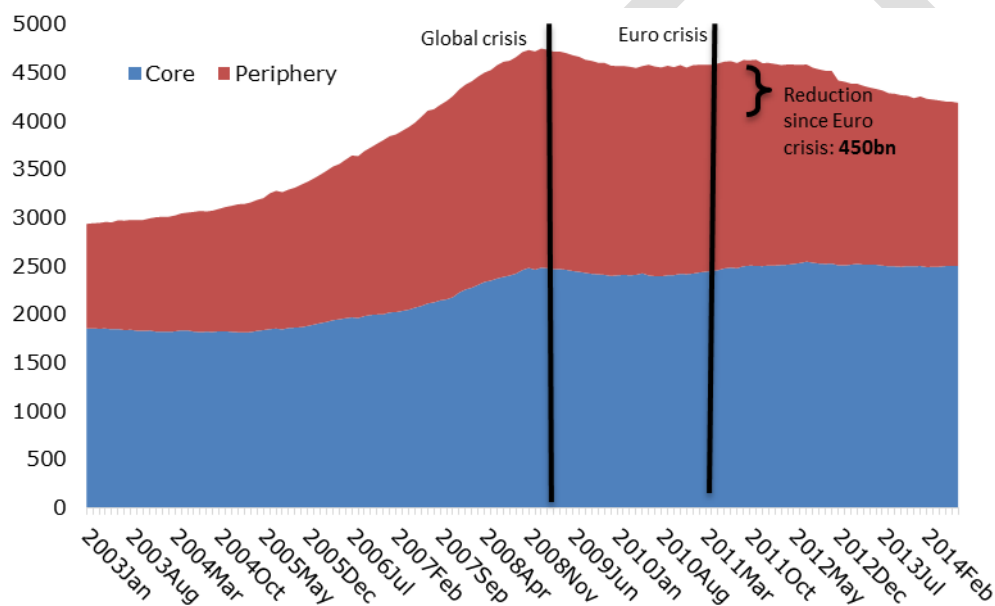
Source: ECB data warehouse, Bank Lending Survey.

5.2. Core versus periphery

The euro area averages depicted above might not be relevant if one considers that credit/banking markets still appear segmented according to the core/peripheral line. The TLTRO is not designed to take into consideration this issue, as access to the program does not depend on the condition of the domestic credit market.

At present approximately 60% of euro area MFI loans to non-financial corporations and households (excluding housing loans) are in core countries (Germany, France, Netherlands, Austria, Finland and Belgium), and approximately 40% in peripheral countries (Italy, Spain, Ireland, Portugal and Greece). The relative weight of the periphery has thus declined considerably since 2008, but it is still higher than at the start of EMU.

Figure 8: Core and periphery bank lending in absolute amounts (billions of euro)



Source: ECB data warehouse.

As shown in Figure 8, over the last years the absolute amount of loans in peripheral countries has declined strongly, confirming at least superficially the existence of a credit crunch. But credit has not increased in most core countries as well, although banks in these countries cannot be said to have experienced refinancing problems (apart from a brief period in 2008-2009).

5.3. Credit rationing under structural change

The demand versus supply debate might be missing a central point, namely the potential for credit rationing in a market that is dominated by asymmetric information. This was emphasised already about a quarter of a century ago in a classic paper by Stiglitz and Weiss (1981) who showed that credit rationing can arise in equilibrium under a variety of circumstances when the lenders have less information about the probability distribution of the returns to investment project that are being proposed to them.

A key element that makes a credit rationing equilibrium more likely is asymmetry of information on the variability of returns. This asymmetry of information can be overcome if banks accumulate enough experience on how observable elements (such as balances, sales growth, etc.) are linked to positive returns. This is one of the reasons why the 'great moderation' could have led to such an expansion of credit. The variability of returns seemed to have diminished. The crisis has overturned this situation and led to a generalised increase in actual and perceived uncertainty, but to a very different degree in the core and the periphery of the euro area. Little has changed in the structure of the German economy, for example. By contrast, the entire economic model of countries like Italy or Spain has to change, with the non-tradable or domestic sector shrinking and the exportable sector expanding. This means that the prospects of SMEs, which operate typically in the domestic sector, must now be particularly difficult to evaluate by the lenders.

Moreover, given the losses many SMEs have recently suffered, their debt/equity ratio has increased. They are thus less able to post collateral. Moreover, land, which is often the most important collateral, has declined in value, thus contributing to a scarcity of collateral, which also makes credit rationing more likely.

This view of the present financing difficulties in the euro area periphery implies that the cause is a question of neither supply nor demand for loanable funds, but rather of changing economic structures that make general problems of the credit market, namely asymmetry of information, much more relevant. It follows that one should not expect too much from either a recapitalisation of the banks or from monetary policy. If there is credit rationing, it does not matter that much whether the risk-free nominal or real interest rates are positive or negatives.

The credit rationing equilibrium can only be overcome by reducing the asymmetry of information. This should happen gradually over time as the banks learn what parameters can help them to evaluate the riskiness of lending to SMEs in this new environment. Lending should thus recover gradually irrespective of the outcome of the Asset Quality Review or of specific monetary policy decisions like the TLTRO or the new ABS purchase programme. The latter might constitute contributing factors to a recovery of credit, but the real problem is likely to prove impervious to policy in the short run. Measures to improve the structure of the credit market, such as standardised balance sheet information or credit information bureaus, might be more important than any measure the ECB adopts.

Moreover, the availability and demand of credit to small enterprises (the S of SME), which are often singled out as most in need of additional credit, is linked to personal bankruptcy regulations because de facto banks usually ask for a personal guarantee from the owner and/or his family. This implies that the millions of non-performing loans in the periphery must be seen in the context of the insolvency legislation and practices in these countries. In countries where it takes years to enforce a guarantee (whether personal or on a home) banks might become more cautious in extending credit. But the other side is also important. If entrepreneurs know that they cannot escape a failure of their enterprise because of heavy personal bankruptcy legislation, they will hesitate to take on more credit and thus more risk for themselves (see also Gros, 2014).

6. CONCLUSIONS

The new policy tools adopted by the ECB in June and September represent important additions to the arsenal at the disposal of the ECB to fight against the threat of deflation. But neither the 'targeting' of operations under the TLTRO nor ABS purchases are likely to have a strong impact on lending volumes (or on the economy).

The basic reason for this scepticism is that lending to the real economy is no longer constrained by supply problems (such as insufficient capital or high cost of refinancing) but weakness in the real sector itself.

The TLTRO in particular has been designed to provide liquidity to increase the supply of credit to the economy, but the underlying assumption might be mistaken. Moreover, experience suggests that it is difficult to target the use of central bank funding as money is inherently fungible and can take forms other than outright lending.

There are of course still important differences between credit supply conditions in the core and those in the periphery. In the periphery lending has fallen considerably. But the issue for policy is whether this is part of a necessary deleveraging process (bank lending remains higher than in 2007 in both core and periphery) or destructive credit crunch. More surprising is that lending in core countries (which account for 60% of total lending) is not growing despite zero interest rates and very easy credit conditions. This suggests that the problem is not one of credit supply but of weak demand from the economy.

Moreover, in times of structural changes the classic Stiglitz-Weiss (1981) problem of asymmetric information between borrowers and the banks becomes more acute, leading banks to distrust credit applications, which they have difficulty judging under changed conditions. In times of structural change more potential borrowers might thus be shut out of the credit market regardless of the interest rate they would be willing to pay. This is a problem that cannot be overcome by monetary policy. It could only be overcome quickly if more equity capital were available.

Lastly, both the TLTRO and the ABS purchase programme could be seen as providing a subsidy to bank lending. At the same time there is wide agreement that the financial system of the euro area is too bank-centric (as argued by the President of the Commission in his programmatic speech to the European Parliament) and that the banking sector is too large as recently documented by a study of the Advisory Scientific Committee of the European Systemic Risk Board (ESRB). That the ECB tries to support bank lending is understandable from a short-run perspective, but it runs counter to the longer-term goal of 'debanking' the financial system.

REFERENCES

- Bank of England (2014), "Inflation Report", available at: www.bankofengland.co.uk/publications/Pages/inflationreport/2014/ir1402.aspx.
- Draghi, M. (2014) Introductory statement to the press conference (with Q&A)", Frankfurt am Main, 4 September, available at: www.ecb.europa.eu/press/pressconf/2014/html/is140904.en.html.
- ESRB (2014), "Is Europe Overbanked?" Reports of the Advisory Scientific Committee No. 4/June 2014.
- Gros D. (2014) "The Transatlantic Growth Gap", Project Syndicate, available at www.project-syndicate.org/commentary/daniel-gros-attributes-america-s-edge-over-europe-to-its-faster-bankruptcy-procedures.
- Gros, D., Alcidi, C. et Giovannini, A. (2012), "Central Banks in Times of Crisis: The FED vs. the ECB", CEPS Policy Briefs, available at <http://ceps.be/book/central-banks-times-crisis-fed-vs-ecb>.
- International Monetary Fund (2013), "Annex 5 of the U.K. 2013 Article IV Staff Report", available at <http://www.imf.org/external/pubs/ft/scr/2013/cr13210.pdf>.
- Stiglitz, J. and A. Weiss (1981), "Credit Rationing in Markets with Imperfect Information", *The American Economic Review*, Vol 71, No. 3 (June 1981), pp. 393-410.
- Wyplosz, C. (2014), "Is the ECB doing QE?", Voxeu.org, available at: www.voxeu.org/article/ecb-doing-qe.

ANNEX: NOTE ON ABS PURCHASES

The market for ABS purchases appears to be very limited unless the ECB decides to buy residential mortgage based products. The overall volume outstanding in Europe appears to be respectable (about 1.5 trillion, see lower right-hand corner of the table below). But only 732 billion, or one half of the total, is issued within the euro area (and presumably in euro, but part of the issues in London might also be in euro). Of the EUR 732 billion area total, 495 billion have residential mortgages as collateral (RMBS). Furthermore, about 70% of all securitisation in Europe is 'retained', meaning it is not issued for the market but mostly just to be able to use as collateral at the ECB. Most of the existing stock is thus not traded on the market. The volume of outstanding ABS in the narrow sense amounts to only 129 for the euro area and 200 billion for all of Europe. Securitised products with SME credit as collateral (third last column) amount to only 116 for all of Europe and 75 billion for the euro area. It is thus unlikely that this segment could become an important element of the ECB's programme.

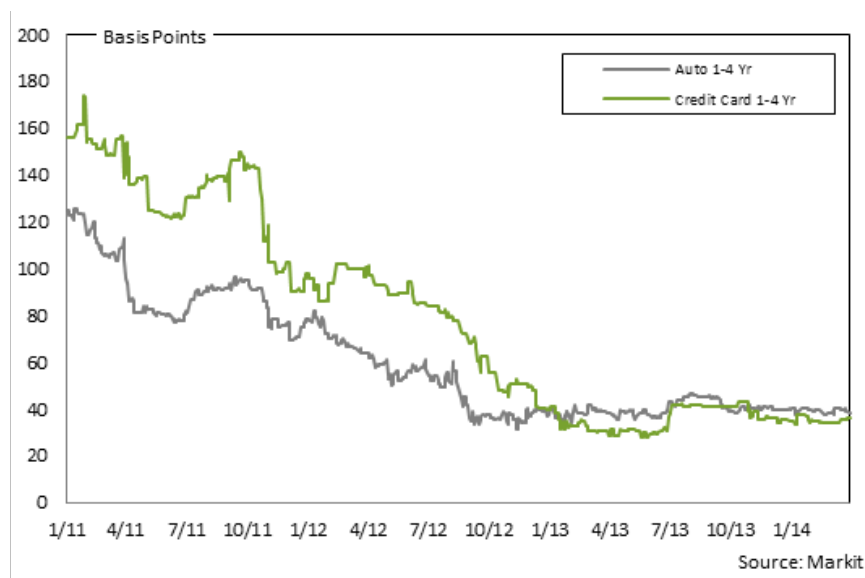
Table 1: Outstanding amounts by collateral and country, 2013:Q4 (billion euros)

	ABS	CDO	CMBS	RMBS	SME	WBS/PFI	TOTAL
Austria	0.3		0.2	1.8			2.3
Belgium	0.1		0.2	63.3	17.8		81.4
Finland	0.6					0.5	1.1
France	20.3		2.0	10.2	1.9	0.5	35.0
Germany	35.8	2.2	10.6	15.2	3.9	0.1	67.8
Greece	14.3	1.8		4.3	6.7		27.1
Ireland	0.3	0.2	0.4	37.6			38.5
Italy	51.1	1.7	10.1	85.7	28.6	0.9	178.1
Netherlands	2.3	0.9	2.5	249.3	8.0		263.0
Portugal	4.2			26.2	8.0		38.5
Russia	0.0			1.3			1.4
Spain	26.9	0.5	0.4	118.0	33.4	0.0	179.2
Turkey	2.2						2.2
UK	36.0	13.7	59.6	249.2	6.1	69.8	434.3
Other	4.2	0.7		0.4	0.1		5.4
PanEurope	1.9	32.6	13.0	0.2	1.1	0.2	49.0
Multinational	0.9	78.2	1.8		0.4	0.8	82.1
European Total	201.3	132.6	100.7	862.8	116.1	72.8	1486.4
EA Total	129.2	6.7	26.1	493.7	75.0	2.0	732.7

Source: Afme report.

A key purpose of the ECB's ABS programme would be to compress spreads on these products. However, the spreads on AAA-rated ABS in Europe are typically already below 40 basis points due to the very low delinquency rates recently mentioned by Mario Draghi⁸. There is thus little room to compress them further.

Figure 8: Spreads on AAA-rated ABS



Source: Afme report.

⁸ <http://www.ecb.europa.eu/press/pressconf/2014/html/is140904.en.html>