WORKING PAPER

Impact of capital regulation on SMEs credit

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Abstract

The Supporting Factor was introduced in Basel III with the aim of avoiding a reduction in the flow of new credit to SMEs, and the CRR revision published in November 2016 even proposes enlarging its scope to exposures above €1.5bn (but with a lower parameter). According to our estimates, in the case of Spain it has triggered a reduction in capital consumption of around €4.2bn per year in 2014-16, €65bn of additional accumulated new credit to SMEs and an extra GDP growth of 0.8 percentage points. Therefore, removing the supporting factor at this early stage of the economic recovery would not be justified.

1. Introduction

The international financial crisis has triggered a complete transformation of global financial regulation. We have witnessed the arrival of a 'regulatory tsunami' in the developed countries which was led by authorities and carried out with the aim of reducing the likelihood and the potential impact of future financial crises. The higher regulatory burden is also geographically fragmented: the regulatory reform, although initially coordinated at a global level, has given birth to different national laws and consistency has been compromised, which harms particularly global banks.

Financial regulation has to strike a right balance between efficiency and stability. Therefore, before adopting new measures authorities, together with the industry, should estimate the quantitative and qualitative cumulative impacts of the whole set of regulatory measures. The ultimate aim would be to prevent a prolonged period of uncertainty and stagnation, while lifting the prospects for growth.

In this document, the influence of capital regulation on credit to small and medium enterprises (SMEs) will be analysed, due to several reasons. First, capital regulation is a key component of the regulatory reform, as banking solvency is one of the main ingredients of its resilience. Stress testing, which measures the capital needs of banks in base and adverse scenarios, has become a very popular supervisory and market discipline tool. The evolution from Basel II to Basel III has dramatically affected the performance and behaviour of the sector. Second, credit to SMEs has a crucial importance in a moment of economic recovery, given the weight of these firms in the employment and gross value added of both emerging and developed economies.

Figure 1.1

SME employment contribution (2014)
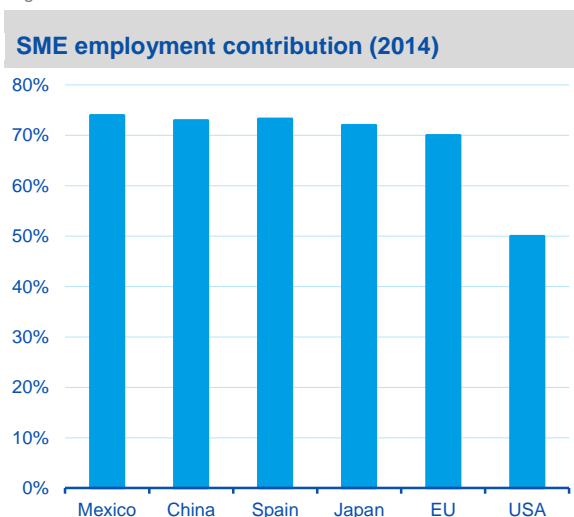
Source: European Commission and World Economic Forum

Figure 1.2

SME GDP contribution (2014)
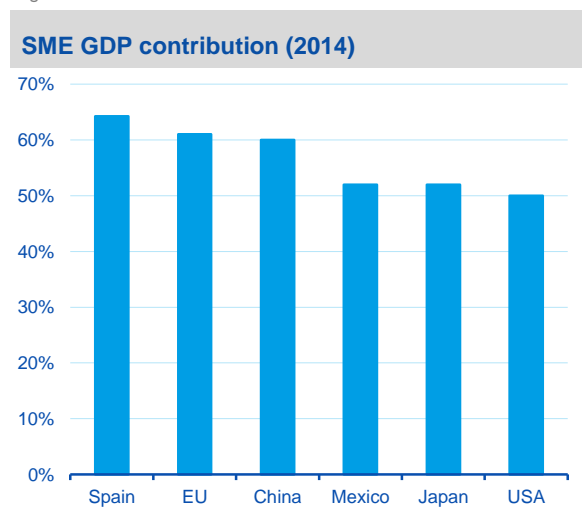
Source: European Commission and World Economic Forum

Given their size, SMEs tend to be very dependent on bank credit, as other financing sources such as wholesale debt or intra-firm funding are not available. SME credit is also a very important portfolio for banks, so that competition for these clients is usually high. For example, in the case of Spain, new credit to non-

financial corporations below one million euros (used as a proxy of SME credit) has accounted for a growing percentage of new credit to the private sector, accumulating the 42% from January to November 2016. However, banks have difficulties when measuring the ex-ante riskiness of these clients, which suffer from higher mortality risk (going out of business), lack of credit information and fewer assets that can serve as guarantees. Exporting activities, which tend to be a good sign of the health of firms, are much less frequent in the case of SMEs. For example, only 25% of EU SMEs are engaged in exporting activities according to the European Commission.

Figure 1.3

Share of firms identifying access to finance as a major constraint (2014)

■ Emerging economies   ■ Developed economies
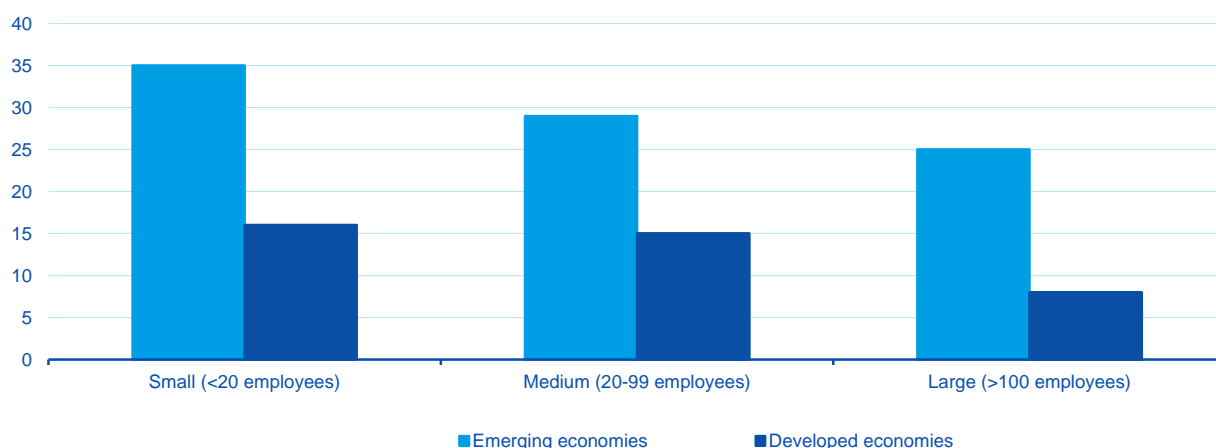
Source: IMF

Therefore, this working paper will try to estimate the impact of capital regulation on SMEs. Chapter 2 presents a summary of SMEs credit capital regulation in Basel III, and the official analyses of the Supporting Factor (SF) impact. In chapter 3, the main impacts of regulation will be quantified in the case of Spain: on capital consumption, on new credit and on the economy. Chapter 4 will evaluate other qualitative impacts of regulation and Chapter 5 includes the conclusions of the paper.

2. SMEs and Basel III

Basel III has represented a regulatory overhaul for banks and has significantly increased the amount and quality of capital. In particular, new liquidity ratio requirements have skewed banks towards less risky assets, such as sovereign bonds. One of the main concerns since the beginning of discussions among central banks and supervisors was the impact on SME loans. There was a true concern that more stringent regulation and additional prudential requirements would reduce the incentive for banks to grant loans to SMEs, which tend to be riskier assets, but are essential for job creation and economic growth. This issue was of particular concern for European banks and authorities, as a larger proportion of SME financing is provided by banks in Europe than in the U.S.

In order to counterbalance the impact of the additional Basel III regulatory requirements and allow for loans to SMEs not to be significantly impacted, a supporting factor for SME loans was included in the Capital Requirements Regulation (CRR). The supporting factor was defined as 0.7619 and applied to the capital requirements of SME exposures in banks' balance sheet. This number, the SF, is estimated as the ratio between the Basel II requirement (8%) and the final Basel III one (10.5%). SME exposures that fulfil the eligibility criteria are allowed to multiply their risk weighted assets by the supporting factor, and thus effectively reduce their capital requirements. All else equal, this supporting factor reduces the relative cost of capital for SME exposures and therefore provides an incentive for banks to continue granting loans to SMEs. According to the European Banking Federation (EBF)[1], the SME supporting factor allows capital requirements for SMEs to remain at the same level as those of Basel II, and therefore not to be negatively impacted by the additional capital requirements established under Basel III. The supporting factor took effect in January 2014.

The Capital Requirements Regulation (CRR) is the main mechanism by which the internationally agreed banking standards, as defined by the Basel Committee on Banking Supervision (BCBS), have been implemented throughout Europe. The CRR includes a differential treatment for SMEs under the standardised approach (SA) and the internal ratings based (IRB) approach, depending on whether they are considered corporate or retail SME exposures, receiving the latter a more favourable capital treatment. It is important to note that the supporting factor does not apply to exposures in default and covers SMEs as defined in the 2003 Commission Recommendation. Two key characteristics considered by the Commission are that SMEs must have a turnover below EUR 50 million per year and that the total exposure of the banking group must not exceed EUR 1.5 million. However, it is important to note that each institution uses its own definition of SME and the Commission's Recommendation is non-binding. The European Commission has recently proposed to extend the SF for SMEs exposures beyond the EUR1.5 million threshold with a factor of 0.85. This differential factor implies an effective discount of 15% on the RWA for larger SME exposures[2].

1: EBF (2015) "EBF Draft Response to the EBA Discussion Paper on the SME Supporting Factor, 1 October.
2: The European Commission proposed a revision to the CRR and CRD IV on November 23, 2016 with the intention of including pending globally agreed financial reforms in the EU. The regulatory package maintains the existing SME deviation and extends it for larger SME exposures by applying a scaled down factor.

In May 2016, the European Banking Authority (EBA) released a report[3] trying to analyse the impact of the supporting factor. It concluded that "there is no evidence that the SME supporting factor has provided additional stimulus for lending to SMEs compared to large corporates". However, the same report highlights that "despite positive growth, SME lending remained below its pre-crisis level" and that access to finance is of greater concern for SMEs than for larger counterparts. The EBA also recognizes that it may be too early to fully capture the impact of the supporting factor, since anecdotal evidence provided by the industry shows that implementation may take longer to be integrated into the decision process of banks. The report also recommends that a harmonized definition of SMEs is included in the CRR, since as it currently stands, institutions are at liberty to identify SMEs according to their own criteria. This harmonization of criteria would lead to greater consistency and comparability across Member States.

According to the same EBA report, the supporting factor has had a significant impact on reducing the capital requirement for SME exposures. The EBA has estimated that on average, this discount has allowed for a RWA reduction of 1.2% during the first quarter of 2015 for European banks, which can be either interpreted as an increase of 0.16 percentage points (pp) in a weighted average CET1 capital ratio of 13.1% (the starting point) or approximately EUR 11.7 billion in additional capital for banks to extend loans. However, the distribution is non-homogeneous across Member States and 60% of the capital relief is concentrated in banks in Italy, France and Spain. The high concentration in few countries is explained by the relative importance of SMEs in the respective economies, but also the banking sector concentration, as the EBA data only reflect the largest banks in each country. Finally, the report states that the impact on smaller banks not included in the study is probably larger than for EBA reporting banks.

A recent study by the Bank of Spain[4] shows that the SF alleviates credit rationing for medium-sized firms but not for micro/small firms. According to the authors, these results suggest that European banks optimized both their regulatory capital and their credit exposures by granting loans to the safest SMEs.

Another report by the Deutsche Bundesbank[5] states that in France and Germany SMEs show a significantly lower systematic risk than large corporates, which is only adequately reflected in the relative calibration of capital requirements for SME after accounting for the relief of the SF. However, no empirical evidence is found supporting the € 1.5 million SME threshold.

Finally, it is important to note that the inclusion of a SF for SMEs is one of the main reasons why Europe was considered materially non-compliant in the implementation of Basel III according to the Regulatory Consistency Assessment Program (RCAP) of December 2014. The RCAP concluded that the Internal Ratings Based approach (IRB) for credit risk was materially non-compliant as its implementations diverged from the Basel III globally agreed reforms. One of the issues was the SF, as it effectively reduced the capital requirement for loans granted by European banks to SMEs below to what was agreed by Basel III. It is comprehensible that Europe wished to minimize the negative impact of higher capital requirements for banks on the loans provided to their SMEs, as financing for this sector depends in greater proportion on banks than their US counterparts

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3: EBA (2016) "Report on SMEs and SME supporting factor" 23 March.
4: Mayordomo, S. and Rodríguez-Moreno, M. (2016): "Support is appreciated: On the effectiveness of the SME Supporting Factor". Bank of Spain. November.
5: Dietsch, M. et al (2016): "Support for the SME supporting factor – multi-country empirical evidence on systematic risk factor for SME loans". Deutsche Bundesbank. November.

and capital markets are more shallow. However, this has implied a reputational cost for EU banks, as they are currently not fully compliant with international agreed banking standards. This can be viewed by the market as a sign of weakness of the European banking system and is the main source of pressure for eliminating the use of SF in Europe.

3. Quantitative Impact on Spain

3.1 Capital requirements on SME credit stock

In order to estimate the capital requirements for the SME portfolio using the different regulatory frameworks (Basel II, Basel III and Basel III without supporting factor), the first step is to identify the volume of outstanding SME credit in Spain. Bank of Spain statistics provide information split by economic activity, but not by firms' size. However, the transparency exercise performed by EBA does include information on Original Exposure (outstanding amount), Exposure Value (Exposure at Default, EAD) and Risk Exposure Amount (Risk-Weighted Assets, RWA) per portfolio. The latest edition of the exercise provides information as of December 2015 and June 2016 of 14 Spanish entities, representing the 90% of national assets. The result is an exposure close to €275 thousands of millions (bn), which represents around 53% of outstanding credit to firms. Additionally, EBA also provides information on the proportion of that exposure that can be considered retail or corporate according to the Basel definition. Assuming the proportion of SME credit to total firms' credit remains constant from 2014 to 2016, the SME credit stock for these two years can be approximated.

In order to estimate the RWA associated to these exposures, in the case of Basel II the weights associated were fixed: 100% for corporates and 75% for retail.

In the case of Basel III, we have split exposures according to the method used (Standard or Internal Ratings Based, IRB) using EBA information. RWAs are calculated using:

- Standard Method: Weights do not change, being 100% for corporates and 75% for retail and mortgages secured by residential property. However, exposures subject to the SF (that are estimated using BBVA internal information) are multiplied by 0.7619.

- IRB Approach: RWA density (RWA/EAD) has been taken from BBVA internal information.

The result is that the use of the IRB and the SF imply a reduction of around 25% of RWAs (26% for corporates and 23% for retail).

Figure 3.1.1

SME credit stock in Spain (EUR bn)
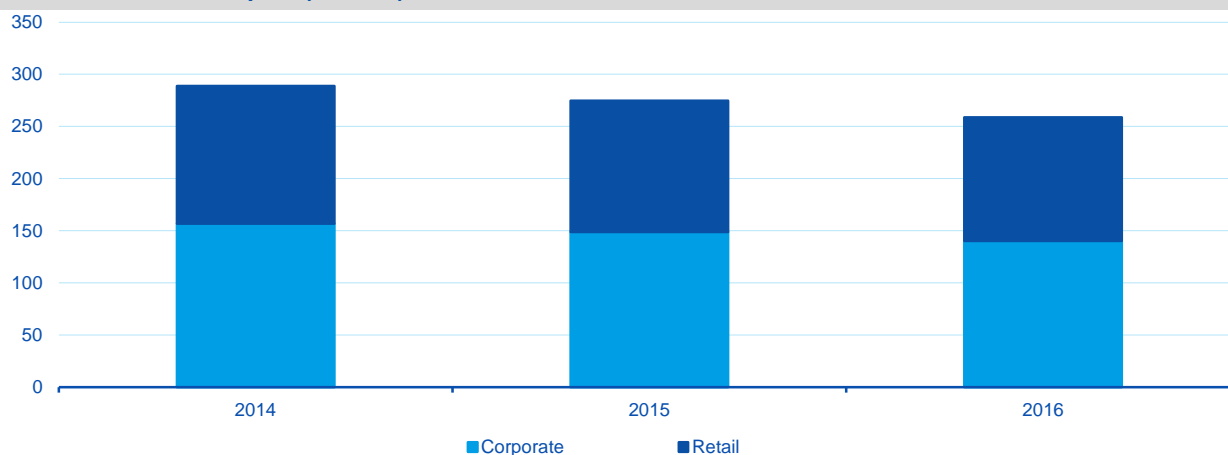
Source: BBVA Research

In order to calculate the capital consumption of these exposures, RWAs have to be multiplied by the minimum capital rate required each year. In the case of Basel II, the requirement was an 8%. In the case of Basel III, there is a calendar (phase-in arrangements) that sets a minimum (total capital plus conservation buffer) of 8% up to 2015, 8.625% in 2016, 9.25% in 2017, 9.875% in 2018 and 10.5% in 2019 onwards[6].

As it can be seen in the chart below, the difference between Basel II and Basel III in terms of SME capital consumption up to 2015 can be mainly attributed to the SF, as the introduction of the IRB models does not alter substantially the capital needed (Basel II and Basel III without SF lines are very similar). However, without the SF capital requirements in 2016 would have been higher in Basel III than in Basel II, as the required capital would be up to 8.625%. Since 2019 onwards, it can be checked that the capital consumption of portfolios subject to SF in the standard method is equal in Basel II and Basel III. On average, capital consumption has been €4.2bn lower in the years analysed.

Taking into account the total RWAs of Spanish banks on those years (and not only those of the SME portfolio) the reported Core Equity Tier 1 (CET 1) capital ratio is included in the chart below. In case RWAs would have been higher due to the non-existence of the SF, the ratio would have been about 0.37 percentage points lower on average. The analysis performed by EBA[7] arrived to similar results, as the impact on the third quarter of 2015 was 0.21 percentage points for all EBA reporting banks (using credit risk RWAs) and close to 0.30 points in the case of Spanish banks.

6: Certain banks can have additional requirements on top of these, for example for being considered systemically important at global or at domestic level.
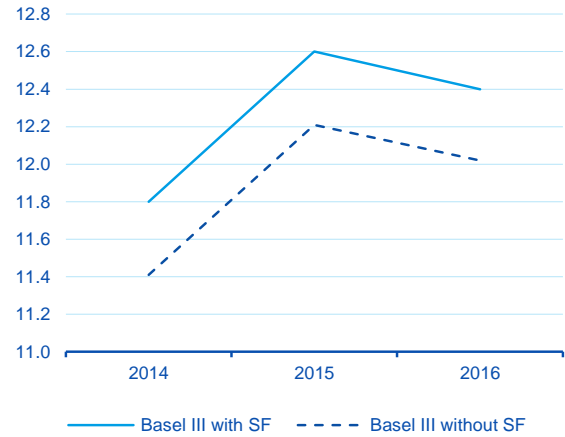7: EBA (2016): "EBA Report on SMEs and SME Supporting Factor", March.

Capital consumption of SME credit in Spain (EUR bn)
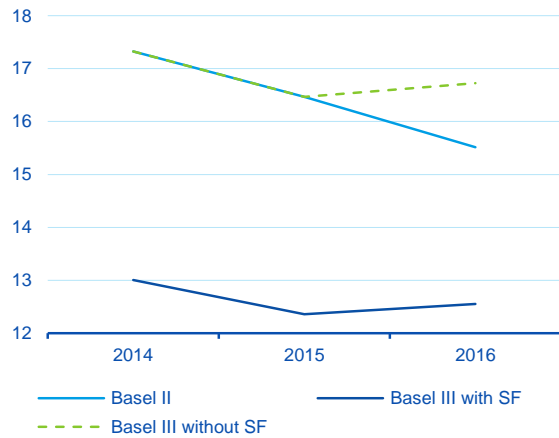
CET 1 capital ratio in Spain (%)

How much capital would be needed to restore the CET 1 capital ratio to its previous level had the SF been removed? In the years analyzed, about €6.3bn on average per year, as the increase in the denominator has to be compensated with a higher numerator.

In summary, the introduction of the SF has had a key role in the capital situation of Spanish banks, as it corresponds to a country in which SMEs have such an importance (they account for 74% of employment and 64% of GDP[8]). During the period 2014-2016, this factor has implied a saving on capital consumption of around €4.2bn on average per year and an increase in the CET 1 ratio of 0.37 percentage points.

3.2 New SME credit

Banking capital regulation was tightened with the transition from Basel II to Basel III. In an attempt to support the economic recovery following the financial crisis and so that credit reached sectors most in need of funding, a reduction factor was introduced for credit to SMEs, the supporting factor (SF). It was formally established in Spain in September 2013, but the Spanish banking sector had already discounted its introduction a few months before.

In order to evaluate the possible impact of the SF on credit to SMEs, we will model[9] the flows of new credit to firms of up to €1 million as a proxy for this group of companies, with indicators from the demand side: activity, prices, and confidence and/or expectations. These credit statistics are available at the Bank of Spain in a monthly basis since January 2003, although we will add them on a quarterly basis. We will take real GDP as an indicator of overall economic activity, which is expected to have a positive elasticity; so that economic growth prompts SMEs to meet the increasing demand for their products or services and to take out credit. Real

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8: According to the European Commission, in the EU28 SMEs accounted for 58% of value added in 2014 while their employment share was 9 percentage points higher.
9: We will use the formulation of the linear error correction models (ECM) in which the long term relationships and the short term relationships between the variables can be separated.

interest rates on credit to companies of up to 1 million euros (discounting inflation) is used as a price indicator, which is expected to have a negative impact; at higher rates investment or intermediate consumption decisions are discouraged as they are not economically viable and demand for credit is reduced. Also, the unemployment rate is used as an indicator of confidence and/or expectations about the right moment to undertake investment projects or intermediate consumption and, therefore, to demand credit. The latter will have a negative sign; any increase in the unemployment rate is a signal to SMEs of decreasing expectations in demand and, therefore, in the taking out of credit.

To capture the effects of the SF, we include a mean change variable in the long-term vector as of the third quarter of 2013. It should have a positive sign, since it supposes a relaxation of supply conditions by having lower capital requirements. That is, for constant economic conditions of demand (activity, rates and expectations), the SF enlarges the part of demand that can be satisfied by supply. But it may also have had reductive effects on interest rates, if there had not been any additional solvent demand and the concession standards had been maintained. The SF is a pure element of supply. We will also include a variable that reflects the exceptional liquidity conditions implemented by the ECB through the TLTROs as of September 2014, and which have meant a reduction in funding costs for credit institutions. Both –SF and TLTROs may have had effects both on the additional amounts of credit that banks could have granted, as well as on the possible reduction in the prices offered.

In addition, we will include seasonal variables and a variable for the methodological change of June 2010[10] in which the credit lines were eliminated from the series, which in this portfolio has had a much more limited effect than in the portfolio of credit to firms of more than €1 million.

Table 3.2.1 shows the summary of final estimates of the SME credit response to the different indicators. All variables have the expected sign and are significant. The statistic of fit, 0.91, is very high, the standard error is 2.7% (i.e. the uncertainty about the average projection for a quarter ahead is at that percentage level) and the ECM parameter is equivalent to a 6-quarter period for the adjustment, which is quite fast.

10: Methodological change introduced by Regulation 290/2009 of the European Commission as of June 2010, which eliminates credit lines from the statistics of new credit companies.

Table 3.2.1

Model parameters: New credit to SMEs	
Long term elasticity	**Sample: 2003Q1 to 2016 Q2**
Supporting Factor	0.25
Real GDP	0.97
Credit interest rates (x100bps)	-0.08
Unemployment rate (x1pp)	-0.04
Short term elasticity	
Δ TLTROs	0.01
Δ Real GDP	3.76
Adjustment statistics	
R2_bar	0.91
Standard Error (%)	2.69
ECM parameter	-0.16

Source: BBVA Research

SME credit sensitivity to demand variables is as follows: a) credit to SMEs has a long-term unitary response to the growth of economic activity, b) a semi-elasticity of -8% for each increase of 100bps in the actual rates, and c) a semi-elasticity of -4% for each increase of one percentage point in the unemployment rate. Therefore, credit to SMEs is very sensitive both to credit prices and to confidence in business expectations reflected by the unemployment rate.

Regarding the supply variables included, the SF parameter is positive and significant, as expected, and complements the evolution of the demand variables from the summer of 2013. As shown in Figure 3.2.2, the evolution of credit to SMEs from the summer of 2013 should have been less dynamic than the one registered, given the stability of the responses to the demand variables. The SF has accounted for about €65bn of additional credit since the summer of 2013 until the third quarter of 2016, which is 13% of the credit granted to SMEs in that period[11]. Also, the ECB's liquidity measures (TLTROs) have since the end of 2014 had a direct but insignificant impact of barely 1% on the funds raised by banks, which is the equivalent of €1.4bn accumulated since the end of 2014, 0.4% of SME loans granted since then.

Figure 3.2.1 shows the evolution of quarterly loans to SMEs with and without the impact of the SF and the Figure.3.2.2 shows the Supporting Factor effect on new credit to SMEs and confidence intervals at 80%.

11: The estimated amount ranges between € 55-76 bn in a 80% confidence interval.
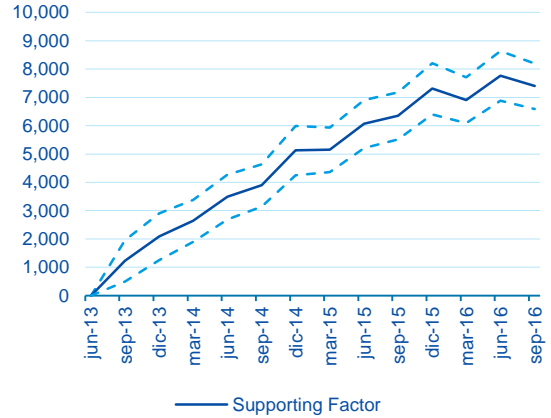
Figure 3.2.1

Credit to SMEs in Spain. New Business. Quarterly. Million EUR
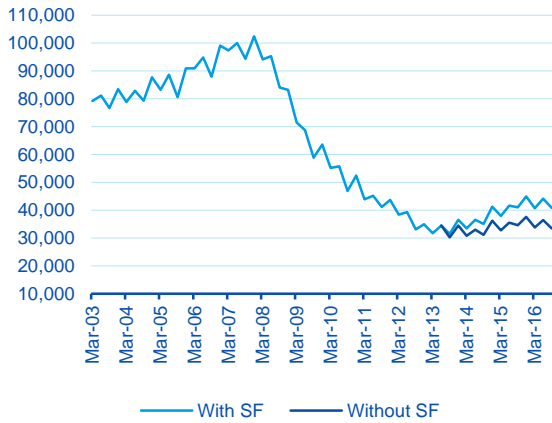
Source: BBVA Research

Figure 3.2.2

**Supporting Factor effect. Quarterly. Million EUR**

Source: BBVA Research

Figure 3.2.3 shows the evolution of credit growth in SMEs in the last ten years and the contributions of each of the demand variables, the SF and the TLTROs. Following the subprime financial crisis in the summer of 2007, credit growth has entered a phase of slowdown, which was intensified with the Lehman event and the international economic crisis in the latter part of 2008. In this phase, the fall in activity and the rise in actual rates explain for the most part the fall in new lending. Both factors contributed negatively until the end of 2013 and 2014 respectively, and positively since then. As of 2009, the drop in expectations (via the increase in unemployment) was one of the factors that had the greatest impact until 2014, but this factor has come to contribute positively from 2015. The SF helps explain the recovery in credit growth from mid-2013 and its contribution remains positive to the present, but it is decreasing. On the other hand, the TLTROs have had an impact on credit growth from the end of 2014, which has been positive but very limited. It should be noted that credit growth has slowed sharply since the last quarter of 2015 and, as can be seen, does not correspond to demand factors or SF, which continue to contribute positively. This slowdown could be related to national political uncertainty on the formation of a stable government or on the reactivation of the economy.

Figure 3.2.3

Credit to SME. New business. Contributions to nominal growth yoy in logs
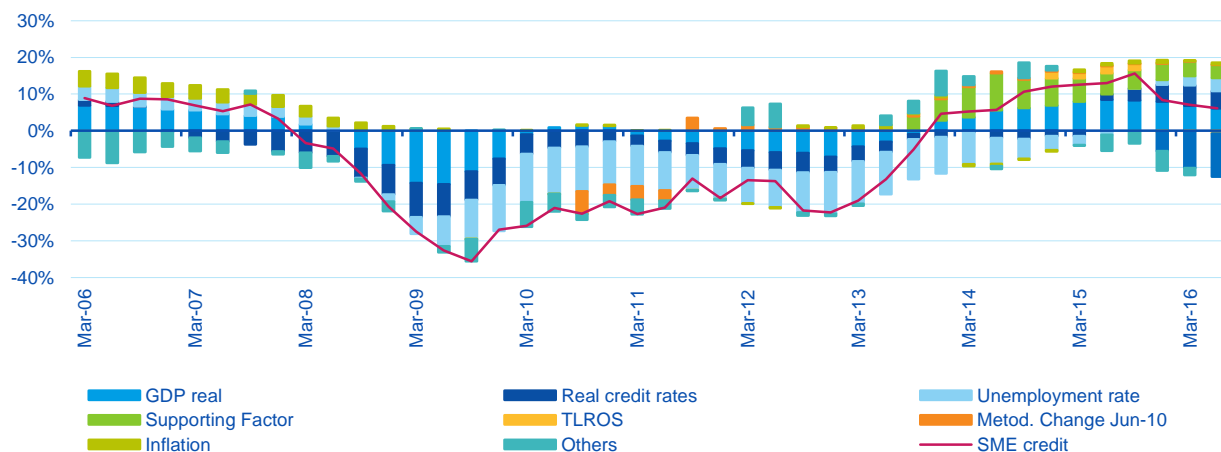
Source: BBVA Research

In short, we estimate that the impact of the SF has allowed credit institutions to contribute with 13% more credit to SMEs (€ 65bn) since the summer of 2013. On the other hand, the ECB's liquidity measures have had a very limited 0.4% impact in this portfolio, which is €1.4bn of the credit granted since the end of 2014.

3.3 Impact on the Spanish economy

Taking into account the SMEs capital requirements previously described, we assess their potential effect on the Spanish GDP of the increase in credit supply estimated in the previous section. To this end we use a structural vector autoregression (SVAR) model, developed by BBVA Research (2014, 2016), which enable us to isolate the impact of structural shocks in the credit market from others of a macroeconomic nature affecting activity and credit flows[12]. In particular, the estimated SVAR identifies credit supply and demand shocks, as well as domestic aggregate supply and demand and other relevant external shocks (conventional monetary policy and European aggregate demand).

Table 3.3.1 summarises the sign and zero restrictions identification scheme implemented on the model which, worth mentioning, is "agnostic" regarding the real economy's response to credit and external shocks (i.e. does not impose an ex-ante restriction) and, therefore, the results presented below are not imposed by construction[13]. The model is also agnostic as regards the credit market reaction to conventional monetary policy impulses. Focusing on the credit market shocks, the identification restrictions imply that increases in the supply or demand for credit push the relative volume of new credit up. However, in the case of a supply shock (an increase in supply) the banking interest rate spread tends to decrease, while in the case of a demand shock (an increase in demand) it should increase. Additionally, it is assumed that these shocks do not

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12: BBVA Research (2014 and 2016) uses the SVAR model to analyze the effects of non-conventional monetary policy shocks through the increase in credit supply.
13: We follow the methodology proposed by Arias, Rubio-Ramírez and Waggoner (2013), which solves the sign and zero restriction bias induced by the Mountford and Uhlig's (2009) penalty function approach (PFA).

contemporaneously affect real benchmark interest rates (the ECB official rates) or the euro area economy as a whole.

Table.3.3.1

Diagrammatic representation of identification of structural shocks with sign and zero restrictions						
Shock / Variable	GDP	CPI (core)	Relative flow of credit	Credit spread	Real short-term interest rate	GDP of the euro zone
1) Aggregate demand	(+)	(+)	0	0	0	0
2) Aggregate supply	(+)	(-)	0	0	0	0
3) Relative demand for credit			(+)	(+)	0	0
4) Relative supply of credit			(+)	(-)	0	0
5) Monetary policy					(-)	(+)
6) European demand						(+)

The shocks are also required to be statistically independent of one another.
Note: in the identification exercise we required the sign restrictions to be complied with in at least two periods, whereas the zero restrictions were complied with only in the period in which each shock took place.
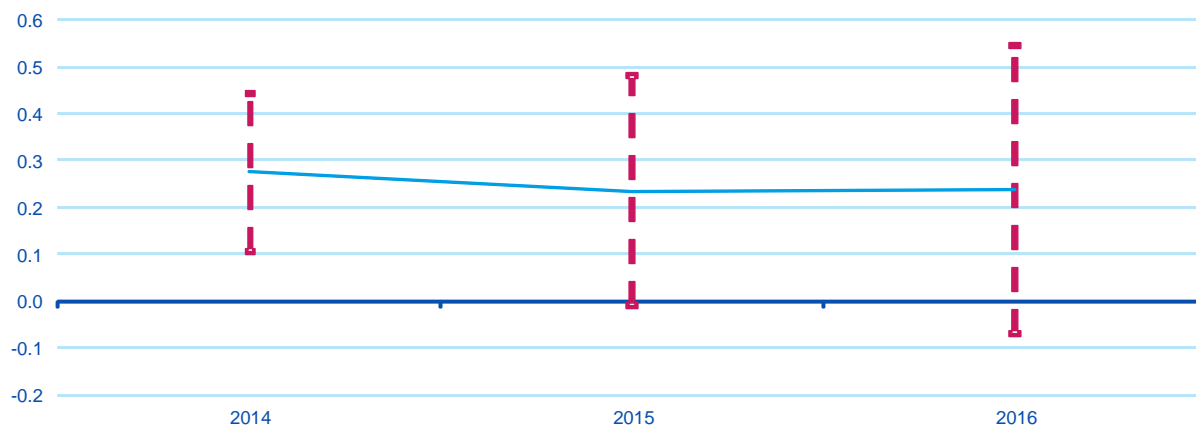Source: BBVA Research

In order to estimate the SF introduction impact on activity we assume that the resulting credit flow increase estimated in the previous section can be characterized as a structural credit supply shock in our SVAR model. Figure 3.3.1 shows the simulation results, which suggest that there has been a positive and statistically significant contribution to GDP growth in 2014 and 2015 (up to 0.28pp and 0.24pp, respectively). The shock impact on 2016 growth continues to be positive (0.24pp), but becomes more uncertain in statistical terms. Taking into account that the estimated credit supply shock induced by the SF since 3Q13 is close to 2.1% of GDP, then the implicit multiplier associated to the extra GDP growth accumulated during the same period (0.8%) is around 0,37 (0.8%/2.1%).

All in all, the results obtained are indicative and must be carefully interpreted. Firstly, because the magnitude of the credit supply shock caused by the SF introduction is subject to uncertainty. Secondly, because the degree of uncertainty revealed by the SVAR model estimates is also high (as shows Figure 3.3.1). Finally, because the estimates take into account credit to SMEs as a component of the total private credit flow, which also includes credit to large firms and households. Therefore, the estimates could vary to the extent that the productivity of the assets financed with this type of credit differs from the average productivity of the assets financed by total bank credit.

Figure 3.3.1

Spain: SF estimated impact on annual GDP growth due to the increase in credit supply (deviation from the baseline scenario in pp.)

Note: Red line is the uncertainty, measured as the percentiles 16th and 84th of the probability distribution function
Source: BBVA Research

4. Qualitative impact

Once the direct quantitative impacts have been estimated, it is worth mentioning the potential indirect qualitative effects of the capital requirements change. In particular we list some potential long-term effects of having lower capital requirements for SME credit.

Starting by the negative impacts, the first one would be a higher probability of a banking crisis, given that capital required is lower. This effect could be due to a higher vulnerability to external or internal shocks. However, its impact could be limited, given that recent estimates point at that an increase (fall) of the CET 1 ratio of 1.5 percentage points would only decrease (increase) the probability of a systemic crisis in 1.54 percentage points[14]. Therefore, the introduction of the SF (that only implies a change in the CET 1 ratio of 0.21 percentage points on average according to EBA) would have a limited effect.

Second, another negative impact would be in the form of increased competition among banks to expand their SMEs market shares, pushing credit concession criteria and prices to unsustainable levels and exacerbating the solvency and profitability problems of banks. This could in turn have an effect on the performance of SMEs, if they understand that credit is available no matter their results[15]. There is even a risk of SMEs being reluctant to increase their size or their credit demand fearing a reduction of available bank funding if their exposure goes beyond the €1.5 million limit. In that sense, the CRR proposal to extend the SF to larger exposures makes sense. Besides, too lax credit criteria could hamper the development of alternative funding sources, which are more adequate for risky businesses or for the first phases of a project.

On the positive size, the economic recovery of developed countries could benefit from a more active SME sector, first via the direct effect of that their value added and employment creation would grow. Indirectly, the new credit flow could favour the rebalancing of the productive capacity towards the sectors that generate more value added after the crisis (like non-real estate sectors in Spain)[16]. Besides, SME mortality (running out of business, quite frequently due to lack of funding) would be lower, avoiding the waste of resources. Additional, available funding resources could help SMEs to increase their size, which usually entails an increase in their productivity. In any case, using capital regulation to pursue industrial policy or financial stability goals is not justified.

Banks are also benefitting from the introduction of the SF. First, in the framework of a slow economic recovery and low official interest rates, SME credit could constitute a source of dynamism and profits. Second, given the numerous regulatory changes experienced during the crises, the relaxation of one of these requirements could be useful to reduce the pressure on the sector. In particular, banks with a retail business model operating in smaller countries (like peripheral European economies) would be more affected due to the higher share of SME credit on their portfolios. These banks typically have a higher RWAs density, so a relaxation of their capital requirements is particularly convenient for them.

In a nutshell, positive effects seem to outweigh the negative ones, in particular if we assume that improved supervision could palliate part of the pervasive potential impacts of the SF.

14: According to the IMF.

15: According to Karlan, D. et al (2016), expanded access to microcredits did lead some entrepreneurs to increase business investments, but rarely increased profits.

16: Unless funds are channeled to the safer firms, which are usually those with a higher size, and those are not in the more dynamic sectors.

5. Conclusions

The SF was introduced in Basel III with the aim of avoiding a reduction in the flow of new credit to SMEs, given its benefits for banks and the economy and the dependency of these firms from bank funding. Although removing it has been considered, the CRR revision published in November 2016 even proposes enlarging its scope to exposures above €1.5bn (but with a lower parameter).

Although it is too soon to estimate the SF effects with certainty, in the case of Spain it has triggered a reduction in capital consumption of around €4.2bn per year in 2014-16, €65bn of accumulated additional new credit to SMEs and an extra GDP growth of 0.8 percentage points.

First, the existence of these measures highlights the need to harmonize certain national definitions in the Eurozone, such as that of an SME. A measure with such an importance should be applied in the same way in all Member States. Second, removing the supporting factor at this early stage of the economic recovery would not be justified. However, this does not imply that these exceptions to the capital regulation framework should be made permanent. In that case, there is a risk of SMEs being reluctant to increase their size or their credit demand fearing a reduction of available bank funding. In that sense, the CRR proposal to extend the SF to larger exposures makes sense, as it mitigates the potential cliff effect of SMEs reluctant to ask for more than €1.5bn in credits. Besides, capital regulation is intended at ensuring the resilience of banks, so using it to pursue industrial policy or financial stability goals is not justified.

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