IMPACT OF RESTRUCTURING PLANS ON LENDING TO NON-FINANCIAL CORPORATIONS

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Introduction

Early this year saw the successful conclusion of the European Stability Mechanism's financial assistance programme to help provide for the ongoing clean-up, restructuring and recapitalisation of those domestic credit institutions (CIs) that had been most adversely affected by the economic situation and by the tensions on financial markets, and to thus restore their financing capacity to normal and to build up their economic activity-supporting function. In exchange for their recapitalisation using public funds, these banks were required to undertake restructuring or resolution processes, obliging them to scale back their activity, thus limiting their capacity to finance new projects.

The aim of this article is to analyse the impact that the adjustment plans of the banks recapitalised with public funds may have had on the overall supply of credit to non-financial corporations in Spain. In this connection, the source of the plans and the banks involved are first recalled. Next, the adjustment made by these banks in recent months – compared with that observed at other institutions not affected – is shown, and the weight of their loans to companies relative to total corporate credit extended by banks in Spain is assessed. Finally, a quantitative estimate is made of the effect that the adjustment plans may have had on the total aggregate supply of lending to corporations. This effect depends not only on the relative weight of the lending extended by the banks affected by the plans, but also on the possibilities that the companies concerned may have had to replace this lending with other loans granted by banks that have not been subject to such plans.

Restructuring plans

The terms of the financial assistance to the Spanish banking sector were laid down in the Memorandum of Understanding (MoU) signed on 20 July 2012. The MoU set out three main courses of action:

- Determination of each bank's capital needs, through an asset quality review and a stress test.
- Recapitalisation, restructuring and/or resolution of ailing banks, identified on the basis of the capital needs detected.
- Segregation and transfer to an external entity (Sareb) of real estate-related assets by the banks receiving State aid.

The results of the capital needs calculated by an external consultant, bank by bank, were made public on 28 September 2012. On this basis, the banks analysed were divided into several groups:

- Group 0: includes those not evidencing a capital shortfall.
- Group 1: comprising banks that were majority-controlled by the FROB before the exercise to evaluate capital needs.
- Group 2: banks with a capital shortfall, and without the possibility of redressing this privately and without State aid.

CLASSIFICATION OF SPANISH INSTITUTIONS IN THE 2012 ASSESSMENT EXERCISE

TABLE 1

	Institutions
Group 0	Grupo Santander
	BBVA + Unnim
	Caixabank + Cívica
	Kutxabank
	Sabadell + CAM
	Bankinter
	Unicaja
Group 1	Banco de Valencia
	NGC Banco
	Catalunya Banc
	Bankia-BFA
Group 2	CEISS
	Liberbank
	Caja3
	BMN
Group 3	Ibercaja
	Popular

SOURCE: Banco de España.

— Group 3: banks with a capital shortfall, but with reliable private plans for recapitalisation and without any need for State aid.

Table 1 shows the CIs belonging to each of these groups. Both those in Group 1 and in Group 2 required State aid, albeit to differing degrees, and therefore had to submit restructuring or resolution plans and obtain the related approval from both national and European authorities. The aim pursued with these plans was threefold: to ensure the bank's long-term viability without additional State aid (or to provide for its orderly resolution, through liquidation or sale, were it considered non-viable); to minimise the burden for taxpayers; and to soften the potentially distorting effects on competition arising from assistance being granted.

To attain these goals, the plans laid down a series of restrictions on banks, including a reduction of 10%-50% (depending on each individual case) in their balance sheets from 2012 to 2017. The percentage required of each bank was proportional to the significance of the assistance received and a portion of that percentage would come about as a result of the obligatory transfer to Sareb of real estate-related assets (in December 2012 for the Group 1 banks, and in February 2013 for the Group 2 banks). Further, the plans generally required the withdrawal from activities other than the traditional retail banking business and the discontinuation of all operations outside the regions of origin of each institution. In principle, then, the impact should be greater on wholesale activities, with large corporations and in the real estate sector.

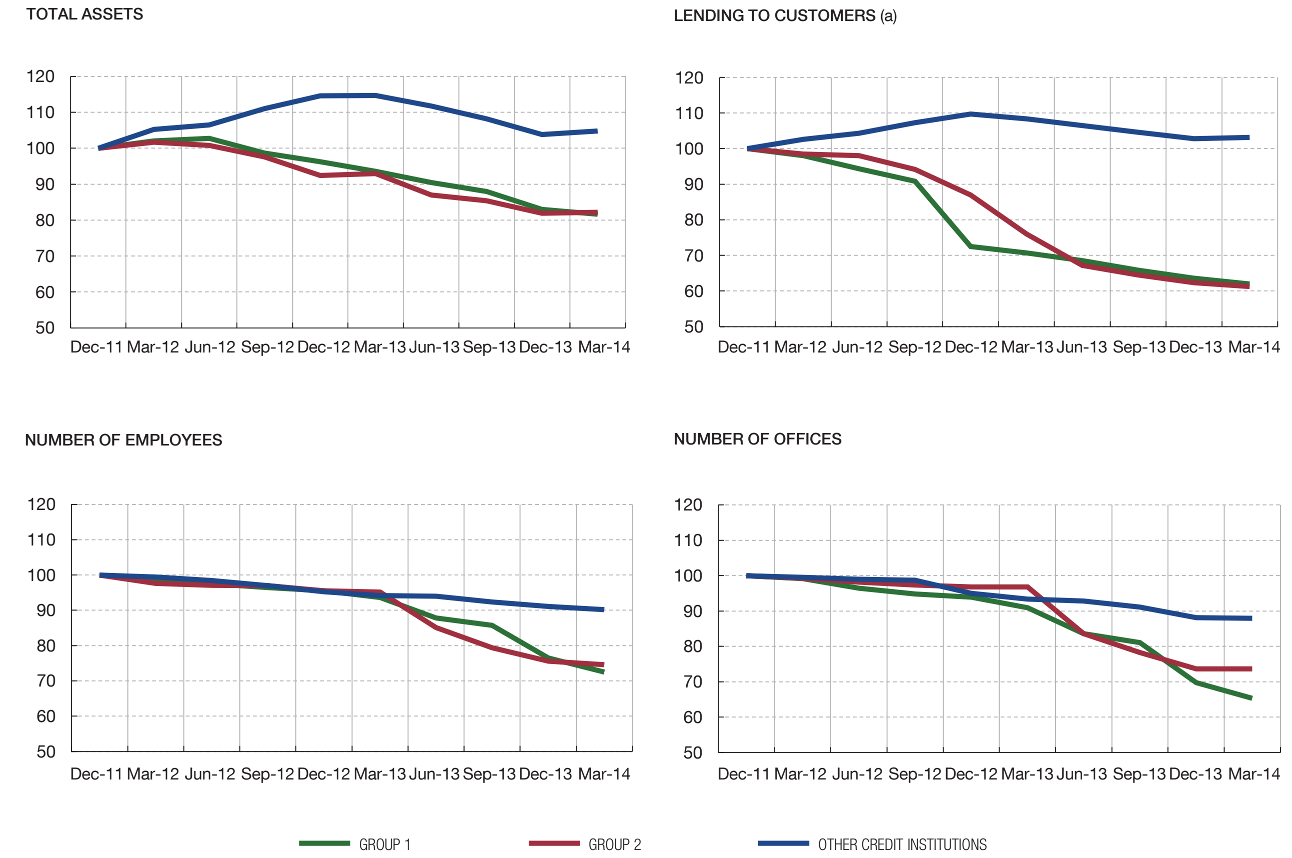
The plans for the Group 1 banks were approved by the European Commission on 28 November 2012, and for the Group 2 banks on 20 December that same year. Generally, they will be in force for five years (to 2017).

Recent adjustment at banks undergoing restructuring

Banks subject to restructuring plans have already adjusted their size and business volume most significantly. Chart 1 compares total assets, lending to customers and numbers of offices and employees from December 2011 to March 2014, for the banks belonging to

CREDIT INSTITUTIONS UNDER RESTRUCTURING COMPARED
Dec 2011 = 100

CHART 1



SOURCE: Banco de España.

a Includes loans to general government and to the private sector, except CIs.

Groups 1 and 2 and for all other CIs. In all instances, the adjustment has been significantly greater at institutions subject to restructuring plans. Regarding the number of staff and offices, while these had already been slightly reduced earlier, the difference is seen essentially from March 2013, i.e. shortly after the entry into force of the plans at the end of the previous year. Conversely, in total assets and in lending to customers (which includes loans to the public sector and to the private sector other than CIs), the behaviour of the Group 1 and 2 banks was already notably different from the rest before the plans were implemented, most probably due to their different financial position. However, in both cases the contraction occurred mainly from the second half of 2012. The decline in December that year for the Group 1 banks, and in March of the following year for the Group 2 banks, was largely due to the mandatory transfer to Sareb of virtually all foreclosed assets and of the loans granted for real estate construction and development held by these banks. It should also be borne in mind that an influential factor in reducing the Group 2 CIs' balance sheets was the sale in late 2013 of almost one-third of the business of Banco Mare Nostrum.

Relative market weight of financing to non-financial corporations in Spain

In principle, the adjustment required of banks that received State aid might pose an added obstacle to the growth of lending to households and firms. In practice, the significance of this effect depends, first, on the weight of the institutions subject to constraints in the total lending extended to these sectors; and, further, on the possibilities of replacing the constrained lending with that offered by other banks not subject to restructuring. Indeed,

WEIGHT OF LENDING GRANTED BY INSTITUTIONS UNDER RESTRUCTURING

TABLE 2

	Group 1 (a)	Group 2	Institutions absorbed (b)	Total institutions under restructuring
Percentage of corporations with lending from institutions under restructuring (c)				
September 2012	18.0	7.2	6.9	28.9
March 2014	16.4	6.6	0.0	22.2
Percentage of lending from institutions under restructuring relative to total lending				
September 2012	14.1	2.1	2.9	19.1
March 2014	11.5	2.2	0.0	13.7
Percentage of corporations (September 2012) (c)				
100%-dependent	6.5	2.4	2.1	11.4
> 75%-dependent	8.1	3.0	2.7	14.3
> 50%-dependent	10.0	3.8	3.4	17.6
> 25%-dependent	13.0	5.0	4.5	22.3
> 0%-dependent	18.0	7.2	6.9	28.9
Percentage of lending (September 2012)				
100%-dependent	4.3	0.6	0.5	5.7
> 75%-dependent	5.4	1.0	1.4	8.2
> 50%-dependent	7.1	1.2	1.6	10.9
> 25%-dependent	9.5	1.4	1.9	14.5
> 0%-dependent	14.1	2.1	2.9	19.1

SOURCE: Banco de España.

a Excluding Banco de Valencia, absorbed by Caixabank in July 2013.
b Includes, in adddition to Banco de Valencia, Banco CAM and Unnim.
c The sum of the weights of the three groups may exceed the total since a single corporation may receive lending from institutions from more than one group.

it should be borne in mind that those companies or households that may have seen their availability of funds reduced as a result of the limitations imposed by the plans in force may resort to other banks, not restricted by the plans, to obtain loans. Were they to obtain from the latter the funds they ceased to receive from the former, the restructuring plans would not have any effect on the overall supply of credit. Nonetheless, the possibility of replacing one lender with another is more complicated when there is not enough information on the financial situation of the borrower, a circumstance which tends to arise with increasing frequency in the case of small and medium-sized enterprises (SMEs), which precisely for this reason are usually more dependent on their habitual lenders.

Table 2 shows the relative weight of the banks subject to restructuring plans in the overall supply of lending to non-financial corporations by all Spanish CIs. This relative weight is calculated both in terms of the number of borrowing corporations and of the volume of financing obtained by all these corporations. The institutions that received State aid are in three groups: MoU Group 1 banks, excluding Banco de Valencia;[1] Group 2 banks; and banks absorbed. This latter group includes Banco de Valencia and another two FROB-controlled banks that received State aid but which did not participate directly in the exercises assessing capital needs given their foreseen acquisition by other banks (Banco CAM, absorbed by

1 Banco de Valencia is excluded from Group 1 owing to its absorption by Caixabank in July 2013.

Banco de Sabadell in December 2012, and Unnim, absorbed by BBVA in June 2013). The banks absorbed were also subject to capacity-adjustment requirements owing to the assistance received. But the impact on the supply of credit is likely to have differed precisely because they were absorbed by banks that were not subject to this type of constraint and which, during the absorption process, may also have had access to the information that these absorbed banks already had on their borrower corporations.

If the "dependent corporations" of the banks under restructuring are defined as all those which had one or more loans outstanding with those banks (irrespective of their amount), these dependent corporations accounted, in September 2012, for 29% of the total non-financial corporations in Spain and for 19% of the total lending extended to the corporate sector. These percentages, while significant, highlight the minority nature within the overall Spanish credit system of these corporations. The companies dependent on the Group 1 CIs showed the highest proportions, accounting for 18% and 14% of total corporations and of total outstanding loans to corporations, respectively.

From the standpoint of corporations, it is also important to consider the relative weight of the loans granted by banks subject to restructuring plans in the total funds received by the corporation. More specifically, corporations in which the weight of such loans was smaller were already operating to a significant extent in September 2012 with other CIs not subject to restrictions. Consequently, their capacity to replace one lender bank with another was conceivably greater.

As Table 2 shows, when this relevant information is taken into account, the potential impact of the restructuring plans diminishes further. Thus, for instance, corporations that received more than 50% of their financing from banks under restructuring account for only 18% of total corporations and the lending received accounts for 11% of the total outstanding balance of loans to corporations.

An assessment of the impact of the restructuring plans

To analyse the potential impact of the adjustment plans on lending to non-financial corporations, it should first be considered how lending would have performed had such plans not existed. To this end, this article estimates a simple model which relates changes in lending[2] at the level of the individual companies to its main determinants, combining the information on the outstanding balance of loans to each company from the Central Credit Register (CCR) with the information on their results and financial position from the Banco de España's integrated database (CBI).[3 4] The model includes: sectoral variables (up to two digits of the 2009 CNAE classification); company size (large, medium-sized, small and micro-enterprise); the existence of doubtful and written-off loans; and other variables indicative of a company's economic and financial position, such as its debt level, profitability and the growth in its sales and headcount.[5] By adding to this model a variable that is equal

2 Along the lines of the exercise explained in Box 6.1 of the Banco de España 2012 Annual Report, which analysed lending by institutions over the period 2010-12.

3 The CBI combines the data from the Central Balance Sheet Data Office Annual Survey (CBA), which mostly includes large and medium-sized companies, with the data from company registers (CBB) which include mainly small companies. Overall, when combined with the CCR data, information is available on approximately 400,000 companies.

4 The CCR provides data on drawn and undrawn credit balances, including loans on balance sheet and loans written off. This definition is a better reflection of total financing actually received by companies.

5 All the control variables refer to the initial period (September 2012 for the CCR data and 2012 or 2011 for the CBI data) to avoid problems of endogeneity and reverse causality. The fit of the equation is, in any event, very low ($R2 = 2\%$), reflecting the significance of company-specific data in corporations' demand for funds. Nevertheless, in general, the coefficients of the control variables have the expected signs and are significant.

ESTIMATION OF THE DIFFERENTIAL EFFECT ON LENDING TO CORPORATIONS ARISING FROM DEPENDENCE ON CREDIT INSTITUTIONS UNDER RESTRUCTURING (a) (b)

TABLE 3

	Coefficient	P-value
Group 1-dependent corporation	-2.654	0.000
Group 2-dependent corporation	0.704	0.002
Corporation dependent on absorbed banks under restructuring	-0.371	0.168
Group 1-dependent corporation. Less than 25%	-2.081	0.000
Group 1-dependent corporation. 25%-50%	-4.497	0.000
Group 1-dependent corporation. 50%-75%	-5.699	0.000
Group 1-dependent corporation. 75%-100%	-1.537	0.011
Group 1-dependent corporation. Large	-2.768	0.173
Group 1-dependent corporation. Medium-sized	-2.513	0.000
Group 1-dependent corporation. Small-sized	-2.947	0.000
Group 1-dependent corporation. Micro-enterprise	-2.578	0.000
Group 1-dependent corporation. Construction and real estate services	-1.777	0.056
Group 1-dependent corporation. Other sectors	-3.045	0.000

SOURCE: Banco de España.

a Obtained from a model that explains the change in the outstanding balance of lending granted between September 2012 and March 2014, controlling for the main determinants of the supply of and demand for financing: variables for sector (up to 2 digits of the 2009 CNAE classification), size of the corporation (large, medium-sized, small and micro-enterprise), the existence of doubtful and written-off loans, and other variables indicative of the company's economic and financial position, such as debt level, profitability, and growth in sales and headcount. The sample comprises 312,890 corporations with information drawn from both the CCR and the CBI. The model is estimated using OLS with standard errors robust to within-cluster residual correlation, defined by the sector and group of banks on which the corporation depends.

b A corporation dependent on a certain group is understood to be any corporation with outstanding loans as at September 2012 granted by CIs in that group.

to 1 if the company depends on CIs under restructuring and to 0 if it does not, it is possible to estimate the effect derived from that dependence, i.e. the effect the constraints imposed by the restructuring plans have on the resultant supply. Moreover, as what is analysed is the total lending received by the company (and not just that extended by CIs under restructuring), it is important to note that this method of estimating the effect of the plans already takes account of the possibility of one lender being replaced by another.

The first three rows of Table 3 show the effects estimated for the three groups of CIs under restructuring identified in the previous section. In the case of companies that have received funds from Group 1 banks, the adjustment plans can be seen to have exerted a contractionary effect, as loans are lower (2.6%) than at equivalent companies that do not depend on banks under restructuring. Nevertheless, the table also shows that the effect is not significant for companies that depend on absorbed banks, and that it is even slightly positive for companies that lend from Group 2 institutions. The points mentioned above in respect of the absorbed institutions (for instance, the soundness of the absorbing banks and their access to the information held by the absorbed institutions on their borrowers), together with the fewer constraints imposed on Group 2 institutions, most likely explain these different results by group of banks.

Consequently, quantification of the possible contractionary effect of the restructuring plans should be confined to the group of companies that received lending from Group 1 institutions. As the relative weight of the lending extended by those banks in the overall supply of credit to companies was 14.1% in September 2012 (see Table 2), the overall contractionary effect of the restructuring plans on lending to non-financial corporations in Spain (between September 2012 and March 2014) can be estimated at approximately 0.4% (i.e. 2.65% x 0.141). However, this figure probably overstates the contractionary effect, as the exercise performed takes no account of the overall positive impact on investor confidence of the recapitalisation and restructuring of the Spanish financial system, which affects all banks, not only those under restructuring.

The next three rows of Table 3 show how this estimated effect differs considerably from company to company, according to their degree of dependence, size and industry. In particular, the impact is greater in companies whose dependence on Group 1 CIs was between 25% and 75% in September 2012. Where the degree of dependence was less than 25%, the contraction in lending was lower, as was to be expected given that these companies were foreseeably more likely to replace this lending with lending from other institutions, since an already significant portion of their lending already came from other CIs that were not subject to restructuring plans. At the opposite end of the scale, the smaller decline in lending that was also observed at companies where more than 75% of bank financing came from Group 1 CIs might be explained by the banks' own interest in continuing to finance companies, within the limits allowed by the restructuring plans, with which they did most business and on which they would foreseeably have more information.[6]

By size, the estimated effects are similar in amount, but they would be statistically significant for SMEs while not so for large corporations. Lastly, the sharpest decline in lending extended would have been at companies other than those in the real estate construction and development sectors. It should be borne in mind here that in the information used (taken from the CCR) and in contrast to Chart 1, the loans transferred from institutions to Sareb remain as loans of the originator institutions, which skews the contractionary effect to the downside.

As indicated, this estimated reduction in lending as a result of the restructuring plans is the outcome, on one hand, of the fewer funds lent by the Group 1 CIs, but, on the other, it also reflects the extent to which the companies affected have been capable of replacing these institutions with others as fund-suppliers. In a world in which this substitutability between lender banks were perfect, both effects would have cancelled each other out. Accordingly, the fact that a non-zero impact is found indicates that substitutability has not been perfect. In practice, although there is obviously leeway to carry out this substitution since the bulk of the Spanish financial system has not received any State aid and nor has it been subject to adjustment plans, there are also frictions – related to the above-mentioned information problems – that restrict substitution.

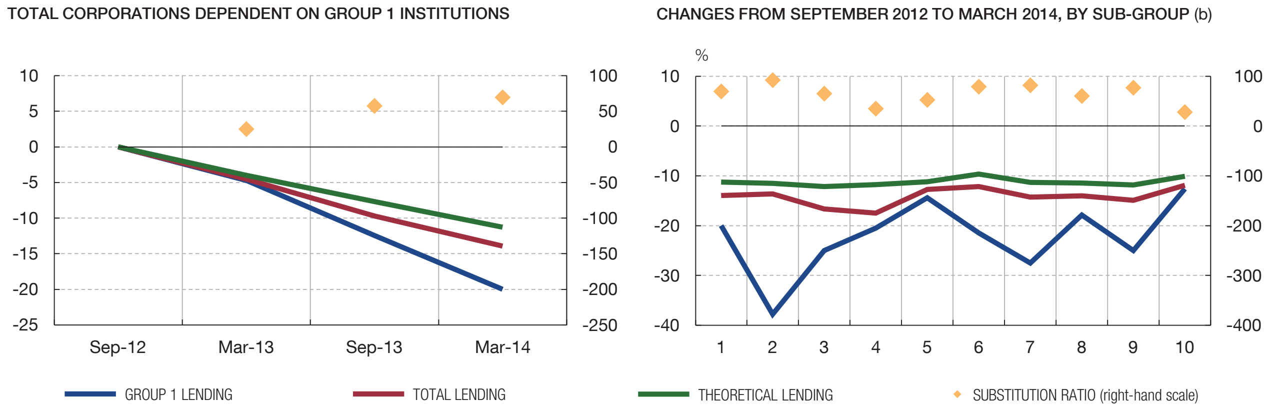
Chart 2 illustrates the actual scope of replacing certain lenders with others. The left-hand panel depicts three measures of the annual decline in lending for corporations dependent on the Group 1 CIs.[7] The difference of almost 9 pp (in March 2014) between the financing granted by Group 1 banks (see blue line) and that which the dependent corporations should have received, according to the estimated model, in the event of their not having depended on these banks, reflects the contraction in supply by the institutions subject to restructuring plans. That said, the chart also reveals that the decline in total lending actually received by these dependent corporations (see red line) is less than the decline in funds exclusively from the Group 1 institutions (blue line). This indicates that these dependent

6 Moreover, given that large corporations generally diversify their sources of bank financing across several institutions, 97.8% of the companies that receive more than 75% of their lending from Group 1 CIs are small companies or micro-enterprises. This helps to explain the results, as the restructuring plans impose fewer constraints on lending to SMEs than to large corporations.

7 Given the diversity of individual results, in each case the median of the rate of change among the Group 1-dependent corporations is depicted.

BANK LENDING TO CORPORATIONS DEPENDENT ON INSTITUTIONS UNDER RESTRUCTURING (a)

CHART 2



SOURCE: Banco de España

a Reflected, in each case, is the median of the growth for the corporations analysed.

b Categories: 1: Total group 1-dependent corporations; 2: Group 1-dependent corporations with <25% of lending from Group 1; 3: Corporations with lending from Group 1 between 25% and 50%; 4: Corporations with lending from Group 1 between 50% and 75%; 5: Corporations with lending from group 1 between 75% and 100%; 6: Group 1-dependent medium-sized corporations; 7: Group 1-dependent small corporations; 8: Group 1-dependent micro-enterprises; 9: Group 1-dependent corporations not related to the construction and real estate services sector; and 10: Group 1-dependent corporations in the construction and real estate services sector. The Group 1-dependent corporations are those with loans outstanding with institutions belonging to this group as at September.

corporations may have replaced a portion of the funds that they have not received from their habitual lenders. The ratio between this substituted portion and substitution needs offers some idea of the degree of substitutability between lenders.

For the whole of the period considered, the substitution ratio is 70%.[8] It is worth observing how the cumulative decline in lending increases over time in the three lines in the chart, but differently so. In the first six months, the reduction in total lending observed is similar to that stemming from Group 1, indicating a very low substitution ratio (25%). However, over time, corporations' capacity to find other bank lending suppliers has improved.

Furthermore, the right-hand panel of Chart 2 shows the results for different sub-sets of dependent corporations. It is telling how the Group 1 institutions cut their lending essentially to the least dependent companies (by close to 40%), in a possible attempt to retaining in this way their business with the companies with which they had a closer relationship. Nonetheless, the effect on these less dependent companies' overall availability of funds was low thanks to their high substitution ratio (92%). In terms of the size of the borrowers, the substitution ratio was 60% for micro-enterprises, while it hovered around 80% for SMEs.[9] Finally, at corporations in the construction and real estate services sectors, the contraction in lending by the Group 1 institutions (which does not include the decline arising from the transfer of loans to Sareb) was significantly less than at the rest, but their substitution ratio was only 28%, denoting a lesser readiness of lenders to assume additional risks in relation to the real estate market.

Conclusions

The difficulties faced by a part of the Spanish financial system in withstanding independently the consequences of the recent economic and financial crisis led to the need to inject public funds in the form of capital into these institutions. In exchange, these institutions

8 Rounding aside, this gives a decline of 20% in the lending by the Group 1 CIs, of 14% in total lending observed and of 11.3% in the theoretical amount: -14 -(-20)/-11.3-(-20).

9 A figure is not shown for large corporations since the differential effect is not significant.

had to subject themselves to restructuring or resolution plans limiting their permitted range of activities and entailing a reduction in the size of their balance sheets.

This article has reviewed the recent adjustment made by the institutions that received State aid and the impact this may have had on the overall supply of lending to corporations. Particular attention is paid to the possibility that some of the companies affected may have replaced a portion of the funds they have ceased to receive from the institutions subject to plans with loans from other institutions that have not been affected by such plans.

The analysis shows that Spanish companies have been able to compensate for a significant portion of the contraction in the supply of loans associated with the restructuring plans. Substitutability, however, has not been perfect and the greater difficulties involved in replacing certain loans with others have affected SMEs more.

On the estimates made, the aggregate impact of the restructuring plans on total lending to non-financial corporations as a whole may be quantified, with all the necessary caution the procedures used call for, at around 0.4 pp of total lending between September 2012 and March 2014.

This estimate envisages only the direct, specific impact of the restructuring plans and does not take into account the positive effect that the clean-up, recapitalisation and restructuring of the Spanish banking system has had on restoring investor confidence, on normalising the access by all Spanish institutions to financing and, therefore, indirectly, on developments in lending.

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