EUROPEAN NPLS MARKET

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PART A

(Orrick authored articles)

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The Italian GACS: from Law Decree 18/2016 to Ministerial Decree 3 August 2016

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1. Introduction

Italian Law Decree No. 18/2016 ("**Decree 18/16**") published in Official Gazette No. 37 dated 15 February 2016 and in force since 19 February 2016 introduced an Italian government guarantee scheme for senior tranches of securitisation ABS backed by non-performing loans ("**NPLs**") (*Garanzia sulla cartolarizzazione delle sofferenze* or "**GACS**").

Decree 18/16 has been subsequently amended and converted into law by Article 1, paragraph 1, of Law No. 49 of 8 April 2016.

On 3 August 2016, in accordance with Article 13 of Decree 18/16, a decree was approved by the Ministry of Economy and Finance (the "**Ministerial Decree**") which introduced implementing provisions for the GACS framework.

The new regulatory framework is intended to facilitate both banks and financial institutions based in Italy in mobilizing non-performing loans and developing a market for Italian non-performing loans, within the framework of securitisation transactions under Law n. 130, April 30, 1999 ("**Law 130**"). The additional measure, in line with the indication by the European Commission, has been designed to avoid the applicability of the "state- aid" regulation.

The purpose of this article is to investigate certain aspects related to GACS in light of provisions contained in Decree 18/16 and to analyse whether and in what manner the implementing measures enacted under Ministerial Decree have clarified some interpretative doubts raised by commentators and market participants, following the enacting of Decree 18/16.

Firstly, it should be noted that Decree 18/16 already outlines the structure required by the securitisation transactions aiming at access to GACS and contains a detailed description of the characteristics requested for such securitisation transactions. In particular, it is required that:

(i) debt securities issued in the context of securitisation transactions must be backed by receivables transferred by banks and financial intermediaries to an assignee company (a securitisation company, so called special purpose vehicle or "**SPV**") of monetary claims classified as *non-performing*;

(ii) the assigned receivables shall be transferred to the SPV for an aggregate purchase price not higher than (i) their net book value (*i.e.* gross book value net of depreciations) as of the transfer date *plus* (ii) the collections (if any) on the assigned receivables received by the seller between the valuation date and the transfer date;

(iii) the SPV shall issue securities/notes in the form of the so-called asset backed securities ("**ABS**"); collections and recoveries on the assigned claims will only be available for the purpose of satisfying the rights incorporated in the ABS securities and paying the costs of the securitisation transaction;

(iv) ABS shall be divided into (at least) two classes, one subordinated to the other one: the holders of the junior notes will not be able to receive neither interest payment nor repayment of principal, until the holders of the senior notes - the only holders that can benefit from the GACS - are fully reimbursed. Also mezzanine notes may be issued;

(v) the senior notes must have previously obtained a credit rating no lower than the investment grade rating from two External Credit Assessment Institution accepted by the European Central Bank as at 1 January 2016;

(vi) the assigned claims shall be managed and collected by an independent third party (*NPLs Servicer*) which must be different from the SPV and not belong to the same company group. The noteholders may replace the Servicer during the transaction, provided that such replacement shall not negatively affect the credit rating of the senior notes.

The State guarantee GACS scheme is only available for a period of eighteen months from the date of entry into force of the Ministerial Decree; however, this period may be extended for a maximum of eighteen months with the prior approval of the European Commission.

In order to avoid the possibility of such regulation being configured as "State aid", the guarantee is granted upon consideration at a market price calculated as follows: the benchmark is the price of credit default swap baskets pertaining to Italian companies with a level of risk equal to the one assigned to the senior notes covered by the GACS (as provided by Annex 1 and Annex 2 to the Ministerial Decree).

Decree 18/16 provided for some clarifications on the structure of the securitisation transactions, the priority order of payments (Article 4), the eligibility conditions for the application of the State guarantee (Article 5), the requests from multiple applicants (Article 6), the means needed for submitting a request of the GACS and the relevant procedure (Article 7) and other further cases where the guarantee is meant to become ineffective (Article 8).

Also, Article 3 of Decree 18/16 provides a definition of "senior notes", clarifying that such notes shall not be subordinated to other classes part of the same issuance (a class is considered not subordinated to other classes of the same issuance if, in accordance with the priority of payments applicable after the starting of an enforcement action – i.e. *post-enforcement priority* - and, if any, the priority of payment applicable after a formal payment request – *post-acceleration priority* - as indicated in the terms and conditions of the notes, no other classes receive payment of principal and/or interest in priority to such class). In the case of issuance of several senior tranches for instance, the State guarantee may be requested for one or more of such senior tranches.

2. GACS securitisation structure

As mentioned above, Decree 16/18 provides the structural features of the securitisation transactions for which the State guarantee is to be requested. The Ministerial Decree expressly regulates the transfer price, tranching and financial structure of the notes, rating, payment of interest and repayment of principal on the notes as well as the priority order of payments.

This perspective is completely different from the approach adopted by the Law 130, which is mainly focused on the essential elements of the securitisation transactions and therefore delegates to market operators the possibility of modelling the transactions according to the specific investors' needs[1].

After the conversion of the Ministerial Decree into law, a different approach could not have been expected from the Ministerial Decree, which seems to have restricted the possibility to amend the structure of the transaction introducing, for example, a prohibition on modifying the features of senior securities without the express consent of Ministry, subject to penalty of voiding the state guarantee [2].

One of the most important provisions concerning the securitisation structure is the order of priority of payments. In this respect, Article 7 of Decree 18/16 provides that the amount resulting from (i) the recoveries and collections from the portfolios of assigned receivables (*i.e.* issuer available funds), (ii) the hedging agreements and the credit facility loan (if any); net of amounts withheld by the entity appointed for the collection of the assigned receivables for its management activity according to the terms agreed with the assignee company, are used in the payment of the following items according to the following order of priority:

(a). taxes (if any);

(b). amounts due to the service providers;

(c). payment of the amounts due by way of interest and fees in connection with the activation of the credit facility provided under Article 4, paragraph (f) of the Ministerial Decree (which may be included in order to manage the risk of any mismatch between the amounts arising from the collections on the portfolios of assigned loans and the amounts needed to pay interest accrued on the senior notes);

(d). payment of amounts due in respect of the granting of the GACS guarantee on the senior notes;

(e). payment of amounts due to counterparties of financial hedging agreements;

(f). payment of the amounts due by way of interest on the senior notes;

(g). replenishment of the credit facility, if drawn;

(h). payment of the amounts due by way of interest on the mezzanine notes (if issued);

(i). repayment of the principal of the senior notes until full repayment of such notes;

[1] In this sense FISCALE, *GACS (Garanzia Cartolarizzazione Sofferenze) – Lo Schema di garanzia statale italiano per i titoli senior emessi nell'ambito delle operazioni di cartolarizzazione di NPLs*, in *Rivista di diritto bancario | dottrina e giurisprudenza commentata*, March 2016.

[2] Art. 5 of Decree requires the consent of the Ministry for the following amendments: (i) modification of either nominal amount or capital for *senior* securities; (ii) increase in the interest rate applied to *senior* securities or to *mezzanine* securities in case of higher level than the payment of share capital for *senior* securities; (iii) modification to the maturity date for *senior* securities; (iv) change of events that entitle *senior* securities holders to declare the Securitisations company to be excluded from the benefit of term or to apply *post-accelerated and post-enforced payment priority*; (v) modification of securities settlement or transaction contracts that results in a deterioration in *senior* securities rating; and (vi) any modification of securities settlement or settlement arrangements in the event of the guarantee being executed pursuant to Art. 11 of the Law Decree.

(j). repayment of the principal of the mezzanine notes until full repayment of such notes;

(k). payment of the amounts due as principal and interest or other form of remuneration on junior notes.

With reference to the order of priority of payments under Article 7 of the Ministerial Decree, there are two aspects to be considered.

The first point concerns whether or not payment of the Servicer fees must rank senior with respect to the other items of the order of priority (therefore, also with respect to the senior notes). This question arises in relation with regard to certain provision under Article 7 of the Ministerial Decree, which provides that the cash flows arising from the assigned portfolios should be used to pay the above-mentioned items "*net of amounts withheld by the entity appointed for the collection of the assigned receivables for its management activity according to the terms agreed with the assignee company*". The fact that the law expressly refers to the "*terms agreed with the assignee company*" suggests that it would be possible to establish different terms of payment for the *Servicer fees*, which would therefore not necessarily be considered as ranking senior with respect to the other items.

The second aspect relates to the flexibility of the same order of priority of payments. In particular, the question is whether such priority, with reference to both the number of items indicated and the order in which those items are listed, should be considered mandatory or its aim simply consists in clarifying which items must rank higher than the payment of amounts due on the senior notes and, once such requirement is met, allowing therefore for a different structure of the same order of priority.

It could be argued that the combined provisions under Article 7 of the Ministerial Decree and Article 4 of the Ministerial Decree allow for a structure of the order of priority of payments which may be different from the one expressly provided by law once all these rank senior to the payment of the senior notes. Indeed, 7, paragraph 1-*bis* of the Ministerial Decree provides that, in certain cases, the amounts due to services providers and counterparties in the financial hedging agreements might be subordinated to the repayment of all the amounts due on the senior notes.

Moreover, Article 4 of the Ministerial Decree provides that (i) the order of priority of payments applicable following an action of enforcement of the notes (*post-enforcement priority*) and/or (ii) the order of priority of payments applicable following deliver of a formal notice (*post-acceleration priority*) shall not provide for any payment which is "senior" with respect to the payments due on the senior notes, other than such payments expressly referred to in Article 7 of Decree 18/16. Therefore, according to this provision it seems that the purpose of the Ministerial Decree is simply establishing the items to be considered "senior" on the payments due on the senior notes but without prejudice to the possibility of providing for a different scheme of the order of priority outlined by the Ministerial Decree.

3. Restrictions to GACS access

Decree 18/16 originally provided that only Italian banks were allowed to access at the GACS guarantee. After conversion into law, financial intermediaries registered according to Article 106 of the Legislative Decree No. 385 of 1 September 1993 (as subsequently amended, the "**Consolidated Banking Act**") are also admitted to applying for the GACS guarantee as long as they are incorporated in Italy. Although a further expansion of the eligible entities was desirable, the Ministerial Decree has not introduced any amendments in this respect.

The above results in a significant restriction of entities that can access the GACS instrument and excludes from many entities already active or interested in restructuring non-performing loans, such as leasing companies[3] and other financial intermediaries operating in the consumer credit business and which are not registered in the list provided by Article 106 of the Consolidated Banking Act.

In fact, the above-mentioned entities will not be able to set up a securitisation transaction which benefits from the GACS, unless by recourse to the intermediation of an entity which fulfils the requirements provided and after assigning to such entity the non-performing loans, with the consequence of an increase in transaction costs and complexity in regulating the relationships between assignors and assignees.

Moreover, it should be excluded that an SPV, as assignor of non-performing loans, in order to refinance a securitisation transaction, may simply transfer the assigned receivables to another SPV, with the consequence that the same receivables should be previously retransferred to the original assignors in order to then set up a securitisation transaction that could benefit from the GACS.

4. Criteria for determining the value of the assigned receivables

Pursuant to Article 4, paragraph 1, let. (a) of Decree 18/16, the assigned receivables shall be transferred to the SPV assignee for a purchase price not higher than their net book value as of the date of transfer of disposal (*i.e.* gross book value net of depreciations)[4].

Following the issuance of Decree 18/16, market operators and scholars questioned whether this parameter should have been applied to the purchase price of each individual receivable or to the entire portfolio of receivables, as well as, consequently, on how to valuate individual receivables which have been depreciated or prudently reduced to zero in the balance sheets of banks and financial intermediaries, but that actually maintain a value and a chance of being recovered.

These uncertainties were clarified by Article 2 of the Ministerial Decree, which provides that this parameter should not be applies to each individual receivable but rather to the aggregate gross value of all the receivables included in the assigned portfolio, net of the relevant depreciations and inclusive of any collections arising from the assigned receivables and attributable to the SPV, as collected by the assignor in the period between the valuation date of their accounting value and the date of their transfer to the SPV, as attested by the assignor on the basis of its accounting records.

5. Legal aspects regarding the State guarantee

Some doubts may arise in relation to the legal classification of the GACS as "first-demand guarantee" provided by law considering that that although the GACS is defined as unconditional, irrevocable and at first demand guarantee, its effectiveness is however subject to the condition precedent of the transfer for valuable consideration by the assignor of at least 50% plus 1 of the junior notes and, in any case,

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[3] It should be noted, however, that pecuniary claims arising from leasing contracts may be included in the transaction, classified as non-performing, provided that they are owned by banks or financial intermediaries (see Article 3 (1), Law Decree; Article 1 (1) g), Decree).

[4] The above mention was introduced with the conversion law, whereas originally the Decree Law referred to the *"net balance sheet value"*.

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an amount of the junior notes and the mezzanine notes (if issued), that allows for the derecognition of the securitised receivables form the accounts of the selling originator (the assignor).

Within the framework of the contractual relationship, the "first-demand guarantee" is configured as "independent contract of guarantee[5]" (*contratto autonomo di garanzia*) by which a party undertakes, as a guarantor, to perform immediately ("at first demand") the performance of the guaranteed obligation, regardless of the existence, validity and/or effectiveness of the relationship between the principal debtor and the creditor, derogating from Article 1945 of Italian Civil Code, and without being able to raise any objections ("*senza eccezioni*"), save for the *exceptio doli* which is enforceable against a party acting with wilful misconduct in order to induce the guarantor to enter into the guarantee and then ask for the performance. What distinguishes the independent contract of guarantee is that the obligation to pay is completely independent from the guaranteed obligation, unlike the surety (*fideiussione* pursuant to Article 1936 of Italian Civil Code) which consists in an obligation accessory to the guaranteed obligation.

The classification of the State guarantee as "first-demand guarantee" may be deemed, however, as a purely notional issue after having considered the aspects potentially affected by it. In general, terms, based on the above, qualifying or not the State guarantee as a "first-demand guarantee" may be considerable with reference to:

(i). the guarantor and the related performance of guarantee the obligations of the principal debtor. In this regard, determining whether the GACS is at "first-demand guarantee" or not would affect only the kind of protection provided to the creditor. With respect to the GACS, however, it must be considered that the guarantee obligation is assumed by the Italian Ministry of Economy and Finance (*MEF*) and thus, there would be no doubt about the performance of the obligation once the approval decree of the guarantee has been issued;

(ii). the possibility that the events in the context of the relationship between the principal debtor and the creditor may affect the guarantee. With regard to this aspect, it should be noted that the GACS guarantee is subject to the above-mentioned condition precedent that does not refer to the relationship between the debtor and the creditor. Indeed, in this respect, the provisions under Article 8 of the Ministerial Decree exhaustively clarify and specify the cases where the guarantee becomes ineffective[6].

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[5] The case-law regarding the "first-demand guarantee" agreements states as follows: "*Inserting a "first-demand and without exceptions" payment clause in a guarantee agreement is enough to qualify the relationship as an independent contract of guarantee (known as "Garantievertrag") due to its inconsistency with the principle of accessoriness that characterizes the surety, unless there is a clear discrepancy with respect to the entire content of the agreement"* (Joint Sections of the Italian Supreme Court, judgements No. 3947 of 18 February 2010, Italian Supreme Court, Section III, judgment No. 19736 of 27 September 2011; Italian Supreme Court, Section III, judgment No. 10998 of 19 May 2011).

[6] Pursuant to Article 8 of Decree 18/16, the guarantee is deemed as ineffective in the following cases: (i) when the decision by the SPV or the noteholders to terminate the appointment of the servicer has led to a downgrading of the rating by the ECAI on the senior notes; (ii) the terms and conditions of the notes and/or the other transaction documents have been amended in breach of the provisions under the Decree-Law and Decree 18/16.

6. Enforcement of the guarantee

6.1. The State guarantee enforced by the senior noteholders

The provisions of Article 11 of Decree 18/16 allow the holders of the senior notes, upon the expiration terms under the above-mentioned Article 11, to request the operation of the GACS "*jointly and through the representative of the noteholders (RON)*".

Therefore, an investor is not allowed to enforce directly and autonomously the guarantee but it must first request the SPV to pay the amount secured by the GACS and then enforce the GACS acting in concert with the other holders of the senior notes and with the prior consent of the RON.

It should be noted that the appointment of the RON (*Representative of the Noteholders*) is not regulated neither by the GACS law (being Decree 18/16 and the Ministerial Decree) nor by Law 130, so the operation of such entity has been shaped by the market practice and based on the regulations related to bond issues under the Italian Civil Code.

However, Article 5, paragraph 2 of Law 130 provides that Articles 2410 to 2420 of the Italian Civil Code do not apply to the issues of the ABS notes. Therefore, the application of all Italian Civil Code regulations on bonds issues is expressly excluded, including Articles relating to the bondholders' meeting (Article 2415), the right to appeal the resolutions of the meeting (Article 2412), the representative of the bondholders (Article 2417) and its duties and powers (Article 2418).

Furthermore, there is still no clear interpretation as regards the powers of the meeting of the noteholders and their role with respect to the enforcement of the guarantee. In particular, some interpretative doubts may arise as to whether the enforcement of the guarantee should be requested by all the senior noteholders or may be requested also by the single investor on its own, *pro quota*.

In the first case, although the noteholders share a common interest, the existence of a right of enforcement on an individual basis would mean that the establishment of an organisation of the noteholders should be contractually regulated. Therefore, the noteholders meeting, by applying the rules regarding the requested majorities, shall express an indication to the RON in order to enforce the GACS. Anyway, if the meeting of the noteholders and, consequently, the RON decide not to enforce the GACS, the matter of the rights and protection of noteholders who are in minority would not be resolved.

With reference to the second case (the request by individual investors not organised in a meeting), the same issues would arise in relation to the remedies against the decision of the RON to not enforce the guarantee (since the decision should be made jointly with the latter).

Moreover, within the framework of provisions on discussion hereunder, the use of term "*jointly* (*concerto*)", (typical concept of administrative law, aimed at regulating internal relations between the bodies of the public entities), further contributes uncertainty as to how to handle the relationship between the interests of the noteholders and those of the RON. The Ministerial Decree does not add anything on this point.

However, it is noted that the transaction documents may provide a prior authorisation to the RON (and, therefore, a consequent obligation on it) to proceed with the enforcement of the guarantee without the need to receive any further instruction from the noteholders.

6.2. Enforcement of the guarantee and payment by the MEF

With reference to the enforcement of the guarantee and, in particular, the execution of payment by the MEF to the senior noteholders for any amount unpaid by the SPV, the question arises as to whether the payment by the MEF may be required after each payment date on which the SPV has not entirely paid interest and/or principal on senior notes or only after the maturity date of the senior notes. In this regard, it is noted that:

(i) (a) Article 11, paragraph 1 of Decree 18/16 clarifies that in order to enforce the GACS guarantee, the prior request by the RON to the SPV of the amount due and unpaid (*"scaduto e non pagato"*) on the senior notes is required; (b) Article 11, paragraph 2 of Decree 18/16 provides that the MEF shall pay the amount unpaid *("non pagato")* by the SPV; therefore, according to this provision, it is understood that the MEF shall pay the amounts due and unpaid by the SPV.

Decree 18/16 provides that non-payment of interest on the senior notes does not cause an acceleration event in the context of the securitisation transaction.

The above means that (in the absence of an amortization plan for the repayment of senior notes), principal on senior notes may be considered due and unpaid only after the legal maturity date of the senior notes and therefore, the enforcement of the guarantee in relation to the principal component may be made no earlier than such date (except, allegedly, in case of acceleration of the securitisation transaction for events different from non-payment of interest on the senior notes);

(ii) with regard to non-payment of interest, it is under discussion whether (a) the enforcement of the guarantee can be made on any payment date in which there are interest due and unpaid on the senior notes, or (b) the guarantee can be enforced only as at the legal maturity date of the notes.

The hypothesis under letter (b) above seems to be excluded (X) by operation of the provision of Article 11, paragraph 3 of Decree 18/16, pursuant to which the MEF is surrogated in the rights of senior noteholders and it shall proceed, subject to payment of interest due to the senior noteholders having been made, to recover the amounts so paid. This provision seems to imply that it would be possible that, following the subrogation by the MEF, there would still be interest to be paid on the senior notes. This would not be possible in case the MEF made the payment of interest on the senior notes only after the legal maturity date of the notes; and (Y) pursuant to Article 5, paragraph 1, let. a) of the Ministerial Decree, according to which the enforcement of the guarantee does not cause an acceleration event in the context of the securitisation transaction. This provision clearly states that the guarantee may be enforced before an acceleration event and, therefore, even before the legal maturity date of the senior notes (date on which such acceleration would allegedly be applicable).

All the above stated, it seems that the enforcement of the guarantee with reference to repayment of the principal component would be possible only after the legal maturity date of the senior notes, while the enforcement of the guarantee with reference to payment of interest would be possible on any payment date.

In this regard, it should be noted that, since the credit rating for the securitisation transaction can be requested on the assumption of a *timely payment* (and so the rating agencies assess the probability that interest on the senior notes is paid on each payment date, whereas the principal component only on the maturity date of the senior notes) or on a *final payment* basis (in which case the rating agencies assess the probability that both principal and interest on the senior notes are paid in full on maturity

date of the senior notes), it seems reasonable to conclude that, in case a timely payment rating is assigned, payment of unpaid interest could be requested from the MEF on any payment date, while, in case of a *final payment* assigned rating, payment of unpaid interest could be requested from the MEF only on the maturity date of the notes.

7. The subrogation of the MEF

Pursuant to Article 11 of Decree 18/16, the MEF is subrogated in the rights of senior noteholders upon payment of the relevant unpaid amounts and it shall proceed, subject to the restrictions contractually provided for the exercise of such rights, to recover the amounts so paid *plus* interest (at the legal rate) accrued from the date of payment up to the date of the reimbursement *plus* the expenses incurred for the recovery.

According to this provision, it should be noted that:

(i). the law provides for a subrogation by operation of law;

(ii). such subrogation would make the MEF subrogated in any rights that the senior noteholders second party may have, and this is confirmed by the fact that the MEF would be subject in exercising such rights to the same restrictions contractually provided under the transaction documents of the relevant securitisation;

(iii). such subrogation would be without prejudice to any additional rights specifically granted to the MEF under Decree 16/18 and the Ministerial Decree (for example, the prohibition from making certain amendments to the securitisation transaction documents without the prior consent of the MEF).

Subrogation of the MEF in the rights of senior noteholders would also imply that the MEF may exercise the voting rights granted to the noteholders at any noteholders meeting. In this regard, however, it should be considered that such voting rights are strictly connected to the amount of principal held by each noteholder, with the consequence that such voting rights could be granted to the MEF only once it has paid the principal on such notes following the enforcement of the guarantee.

8. Eligibility of the senior notes for the ECB refinancing transactions

It seems still unclear whether the senior notes, secured by GACS, would be eligible as collateral in the context of refinancing transaction with the European Central Bank ("**ECB**").

In this respect, the applicable ECB framework regulation seems not to expressly provide the eligibility of the senior notes issued in the context of a "GACS securitisation" or similar transactions.

In addition, an analysis of the current applicable ECB guidelines seems to lead to the following considerations:

(i) the so-called *Temporary Guidelines* expressly require the absence of non-performing loans within the underlying asset of the relevant securitisation (thus excluding the eligibility of securitisation notes having as underlying asset non-performing receivables); (ii) notwithstanding the so-called *Ordinary Guidelines* do not provide for such requirement, however such Guidelines require that (a) the credit rating of the senior notes shall not be less than A-; and (b) the assets included in the assigned portfolio

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shall be homogeneous (for example, an underlying mixed RMBS/SME portfolio would not allow the eligibility of the corresponding senior notes). It is therefore clear that the feasibility of a "GACS securitisation" meeting the requirements provided by the *Ordinary Guidelines* is extremely complex, if not impossible.

The eligibility of the senior notes issued in the context of a "GACS securitisation" would be particularly desirable both in terms of liquidity and as a significant incentive to the recourse and the development of GACS securitisations and, therefore a clarification or an intervention by the ECB in this regard would be welcomed.

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Amendments to Italian Securitisation Law 130/99 as of 24 June 2017

On 23 June 2017, Law 96 of 21 June 2017 was published in the Official Gazette converting Law Decree no. 50 of April 24, 2017 (the "**Decree**"), containing urgent provisions with regard to financial affairs, initiatives in favour of local authorities, further interventions for earthquake-stricken areas and measures for economic development. In the process of conversion of the Decree, amendments were made in order to revise, *inter alia*, the provisions of Law no. 130 of 30 April 1999 on securitisation ("**Law 130**").

1. Executive Summary

Law 130, as amended, now includes a new article 7.1, entitled "*Securitisation of non-performing loans by banks and financial intermediaries*". Paragraph 8 of the same article contains provisions aimed at encouraging securitisations of receivables qualified as non-performing (in accordance with Bank of Italy classification guidelines no. 272 of 30 July 2008, i.e. claims classified as impairments; unlikely to pay or defaulted receivables), as well as their management and recovery. The new provisions provide for, *inter alia*:

(i) the ability of securitisation companies ("**SPVs**") which have purchased non-performing receivables to grant loans aimed at facilitating recovery of the same receivables;

(ii) ability of the SPV, in the context of recovery or restructuring plans and with regard to non-performing loans, to acquire or subscribe shares, quotas and other securities and equity interests arising from the conversion of part of the receivables of the originator;

(iii) vehicle companies which are not SPVs, but are set up in the context of securitisation transactions, which have as their exclusive corporate object the acquisition, management and valuation of the security interests guaranteeing the securitised loans, including claims arising from financial lease agreements; and

(iv) for assignments of non-performing loans, simplified formalities for the enforceability of the assignment through the notice in the Italian Official Gazette, registration in the relevant Company Register, and indication in the relevant notice of the website with the data regarding the receivables assigned.

2. Provisions of new article 7.1 of Law 130

Scope of new legislation

The first paragraph of Art. 7.1 introduces new provisions which apply to the securitisation of non-performing loans classified as such in accordance with the relevant legislation and assigned by registered banks and financial intermediaries (entities registered in the register provided by article 106

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Italian Consolidated Banking Act – "**TUB**") with registered office in Italy. Such provisions, as reported below, apply in addition to the existing provisions of Law 130.

Granting of loans by the SPV

The SPV to which non-performing receivables have been assigned may, in accordance with the provisions of Law 130 on the granting of finance by SPVs, grant loans aimed at supporting the recovery of such receivables and the assigned debtor's return *in bonis* (article 7.1, paragraph 2).

When financing is granted under the aforementioned provision, management of the assigned receivables and the loans granted by the SPV shall be entrusted to a bank or a financial intermediary enrolled in the Register under Art. 106 TUB (article 7.1, paragraph 7).

Acquisition or subscription of financial instruments by the SPV

In the context of recovery plans agreed with the originator or agreements entered into under the Italian Bankruptcy Law (reference here is to article 124 of the Italian Bankruptcy law (*Concordato*), article 160 of the Italian Bankruptcy law (*Arrangement with Creditors*) article 182-bis of the Italian Bankruptcy law (*Debt Restructuring Agreements*), article 186-*bis* of the Italian Bankruptcy law (*Arrangement with Creditors on a Going-concern basis*) or similar recovery or restructuring agreements, the SPV may acquire or subscribe shares, quotas and other securities and equity financial instruments arising from the conversion of part of the receivables of the originator, and grant loans to support recovery of such receivables and the return *in bonis* of the assigned debtor.

In the above cases, under Law 130 the amounts in any way received from such shares, quotas and other securities and equity financial instruments are treated as payments made by the assigned debtors. The same amounts are intended to satisfy exclusively the rights arising from the receivables securitised, and the payment of the transaction costs (article 7.1, paragraph 3).

In the above circumstances:

- the SPV shall identify an entity of adequate standing to be appointed in order to perform, in the interest of the noteholders, management, administration and representative functions;

- in case the above-mentioned entity is a bank, a financial intermediary entered in the register provided for by article 106 TUB), a brokerage company or an asset management company, the same will be considered by law as the entity responsible for ensuring compliance of the activities and operations of the SPV with Law 130 and the prospectus (article 7.1, paragraph 8).

Acquisition and management of assets

In the context of the above, an *ad hoc* company (the "**Vehicle**") may be incorporated which has as exclusive corporate object carrying out activities in the interest of the securitisation transaction. Such activities may include acquiring, managing and valuing registered movable and immovable property and other assets and rights granted or created in any form as guarantee for the receivables under the securitisation, **including assets subject to lease agreements**, even if terminated, and together with the legal relationships resulting from such agreements.

As highlighted in the report accompanying the draft conversion bill, such provision would:

(i) have the main purpose of allowing an improved evaluation of the assets guaranteeing non-performing loans, which are usually subject to excessive write-downs during enforcement procedures; and

(ii) allow the SPV to purchase through the Vehicle the leased assets, thus avoiding that such assets remain with the originator and the securitisation receivables are assigned at a lower price because they are considered as unsecured.

Under Law 130, amounts in any way deriving from the possession, management or disposal of such assets and rights, due by the Vehicle to the SPV are treated in the same way as payments made by the assigned debtors (i.e. collections) and accordingly are applied towards payments on the asset-backed securities issued by the SPV and payment of its transaction costs (article 7.1, paragraph 4).

With specific reference to lease contracts, if the assignment concerns leased assets and the related lease agreements or the legal rights resulting from the termination of such agreements, the Vehicle:

- needs to be consolidated on a bank's balance sheet;
- needs to be set up for specific securitisation transactions; and
- needs to be liquidated once the operation is completed.

Furthermore, with regard to the fulfilment of the obligations arising under the financial lease agreements, such obligations shall be fulfilled by the servicer or by a subject authorised to carry out financial lease activities. The subject is to be identified pursuant to paragraph 8 of article 7.1.

Tax provisions relating to the acquisition and management of assets

By express provision of the Decree, the Vehicle is subject to the tax regulations applicable to companies that engage in financial leasing. The Decree also sets out that the concessions provided for under Art. 35, paragraph 10-ter.1 of Law Decree 223/2006 apply in full to the sale of real estate assets by the Vehicles. This provision provides that assignments arising from redemption or termination for non-performance on the part of the lessee are subject to registration, mortgage and cadastral fees in a fixed amount.

Publication requirements

For the purpose of segregating the receivables assigned and the amounts paid in respect of the same receivables, as well as excluding set-off and ensuring enforceability of the assignment against the assigned debtors in the same way as provided for by article 4, paragraph 2, of Law 130, it is provided that assignments made by banks and financial intermediaries pursuant to article 7.1 and concerning receivables not identified in block are notified by transcription in the Companies' Register and publication of a notice in the Official Gazette stating (a) the originator, (b) the assignee, (c) the assignment date, (d) information on the type of relationship from which the assigned receivables arise, the period during which such relationships arose or will arise, and (e) the website where the originator and the assignee will provide the identification data of the receivables assigned and the confirmation of the assignment to the assigned debtors if so requested by the latter.

Upon publication of the notice in the Official Gazette:

- the effects of article 1264 of the Italian Civil Code apply to assigned debtors;

- privileges and guarantees of any kind, granted by any person, or existing in favour of the originator, as well as the transcriptions in the public records of the deeds of purchase of the assigned assets object of financial lease contracts, maintain their validity and their ranking in favour of the assignee and with no formality or annotation needed to such end.

3. Entry into force

The law converting the Decree entered into effect on 24 June 2017.

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Non-performing loans in Greece

Background

The purpose of this paper is to offer a brief overview of the measures adopted in Greece to address the issue of non-performing loans (**NPLs**), also in light of the ongoing assessment by the IMF and the European Stability Mechanism.

On 6 February 2017, the Executive Board of the International Monetary Fund (**IMF**) completed the Article IV Consultation with Greece. The IMF stated in its Staff Report that Greece has reached important goals in settling political and economic imbalances during the past years; nonetheless, development is still too slow and investment risks remain high. While the new ESM supported program has helped stabilize the economic situation, the underlying issues hindering the recovery have not yet fully addressed.

In particular, the IMF called for decisive action needed to repair the bank and private sector balance sheets, to return to sustainable credit growth, and expressed concern that without reducing NPLs rapidly, banks will not be able to provide new lending to viable firms, hence slowing down the recovery.

The issue of non-performing loans in Greece was already addressed in detail in the context of the financial assistance programme entered into with the European Stability Mechanism (**ESM)** in August 2015. In the Memorandum of Understanding (**MOU**) signed by Greece and the ESM, the authorities were requested to finalize a comprehensive strategy for the financial system, which included legislative reforms to facilitate the reduction of the stock of non-performing loans in Greece.

The legislative measures introduced in Greece

As part of the deliverables under the ESM programme, the Greek Parliament introduced Law 4354 which entered into force on 16 December 2015 (as subsequently amended, the **NPL Law**), which set forth new rules for the sale and management of non-performing loans.

Subsequent amendments to the Law introduced in 2016 have broadened the scope of the law, extending its application to various types of loans (Law 4393/2016), and introducing provisions for the tax treatment of the management and sale of the loans (Law 4389/2016).

Furthermore, the Bank of Greece (**BoG**) issued implementing provisions to the NPL Law with the Executive Committee Act, (ECA 82/2016, as further amended, **BoG Act**), which specifies the licensing and regulatory regime for non-bank servicers and companies that are acquiring NPLs.

The NPL Law framework aims at the creation of a secondary market for non-performing loans in Greece. In particular, the NPL Law sets forth requirements for the establishment and operation of companies purchasing NPLs and servicing companies managing the loans. The Bank of Greece supervises and regulates the activities, as the competent licensing authority under the NPL Law.

Purchase and management of NPLs under NPL Law

NPLs are usually managed internally by the banks through dedicated units. This strategy has resulted to be ineffective to increase the recovery of the non-performing loans. Therefore, transfer of NPL portfolios to special purpose entities and external management of the NPLs has become a pillar of the NPL Law.

Two types of companies are deemed to be eligible to undertake respectively the activity of acquiring and servicing non-performing loans, which was previously limited to banks and financial institutions: (1) Asset Acquisition Company (**AAC** or **Purchaser**), and (2) Asset Management Company (**AMC** or **Servicer**).

The NPL Servicers

Companies that intend to act as Servicer of NPLs under the NPL Law, must satisfy the main following requirements:

(i) established either in Greece (under the legal form of société anonyme), with the sole purpose of servicing loans, or in another EEA member state and operating in Greece through a branch that has as its purpose the servicing of loans; (ii) with registered shares, and a minimum share capital of Euro 100,000; (iii) listed in the General Commercial Registry.

Furthermore, Servicers need to acquire a special operating license granted by the Bank of Greece. The specific provisions and requirements for the licensing procedure are set forth in the NPL Law and in the BoG Executive Committee Act of 95/2016 (which replaced BoG Act 82/2016), which sets forth the supporting documents that the prospective servicer must submit to the BoG, including *inter alia*, extensive disclosure of information regarding the company, its beneficial owners and the company's directors and managers; the company's organizational structure; and a business plan presenting the company's strategy. Approval is granted by the BoG upon satisfactory evidence of the company's capability and suitability to carry out the business strategy.

The NPL Purchasers

The NPL Law does not include particular licensing requirements for companies intending to purchase NPLs. An Asset Acquisition Company must satisfy the following basic requirements:

(i) a company must be established either in Greece as a Greek company under the form of société anonyme, or as a company established in another EEA member state, operating through a subsidiary, having as business purpose the acquisition of loans; (ii) such companies must have signed a loan servicing agreement with a Servicer legally licensed and supervised by the BoG.

Furthermore, the offer of sale for NPLs (with certain exceptions) is conditioned upon the delivery of a notice to the relevant debtor and any guarantor to settle their debts at least twelve (12) months prior to the sale. The sale of the claims must also be registered in a public registry and is effective upon registration, and notified to the relevant debtors. The position of the debtor should not be worsened due to the servicing or transfer of the loan.

Further developments

In December 2016, in order to provide further impetus to the implementation of the NPL Law, the Greek Parliament introduced extensive amendments to the Bankruptcy Code, in order to facilitate, inter alia, pre-bankruptcy arrangements with creditors.

Conclusions

According to the IMF Staff Report, "without reducing NPLs rapidly, banks will not be able to provide new lending to vibrant firms, putting the recovery in jeopardy". Therefore, the IMF has called for the Bank of Greece, together with the Single Supervisory Mechanism, to set ambitious NPL targets and monitor banks'

strategies and performance against these targets. On the other hand, as with other countries where the NPL stock is significant, an effective reform process of the enforcement system is an important incentive for the purchase and recovery non-performing loans. Therefore, in order to be able to develop an effective secondary NPL market, the reform process should continue in Greece, introducing other measures, such as out of court debt restructuring and fully implementing the insolvency and debt-enforcement framework.

PART B

(Courtesy translation of the Italian laws)

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GACS Conversion Law no. 49/2016

Chapter II - Guarantee on the securitisation of Non-Performing Loans (GACS)

Art. 3

(Scope)

1. In accordance with the criteria and the conditions set forth in this Chapter, for a period of eighteen months from the date of entry into force of this decree, the Minister of Economy and Finance is authorised to grant the State guarantee on liabilities issued in the context of securitisation transactions pursuant to Article 1 of Law No. 130 of 30 April 1999, against the transfer from banks and from financial intermediaries enrolled in the register set out under Article 106 of the legislative decree 1 September 1993, no. 385, hereinafter denominated "originators" with a registered office in Italy of monetary receivables, including receivables deriving from lease contracts, classified as non-performing.

2. The Minister of Economy and Finance may, with the prior approval of the European Commission, extend the period referred to in paragraph 1, up to a maximum of a further eighteen months.

3. The Ministry of Economy and Finance, within three months following the positive decision by the European Commission of the state guarantee scheme referred to in paragraph 1, shall appoint, subject to the approval of the latter, a qualified independent party which shall monitor the compliance of the state guarantee with the provisions of this chapter and with the decision of the European Commission referred to in paragraph 1. In relation to any related charges, within a maximum limit of Euro 1 million for each of the years 2016 to 2019, provision is made for the special funding resources referred to in Article 12 to be relied on.

Art. 4

(Structuring of the securitisation transaction)

a) Notwithstanding the provisions of Article 2 of Law No. 130 of 30 April 1999, the securitisation transactions referred to in this Chapter shall have the following features:

b) the assigned receivables shall be transferred to the assignee company for an amount no higher than their net book value as at the transfer date (gross value net of adjustments);

c) the securitisation transaction provides for the issuance of notes (the "Notes") of at least two different classes, in consideration of the degree of subordination in the absorption of losses;

d) the most subordinated class of Notes, called "junior", has no right to receive repayment of principal, payment of interest or other form of remuneration until the full repayment of the principal of the Notes of the other classes;

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e) one or more classes of Notes, called "mezzanine", can be issued, which, with regard to the payment of interest, are subordinated to the payment of interest due to the class of Notes called "senior" and shall be paid in priority to the repayment of principal of the senior Notes;

f) provision may be made for the entering into financial hedging agreements with market counterparties in order to reduce the risk arising from asymmetries between the interest rates charged on assets and liabilities;

g) in order to manage the risk of any mismatch between the funds deriving from collections and recoveries made in relation to the portfolio of assigned receivables and the necessary funds to pay the interest on the senior Notes, provision may be made for the execution of a credit facility for an amount sufficient to keep the minimum level of financial flexibility consistent with the creditworthiness of the senior notes.

Art. 5

(Rating)

1. For the purposes of issuing the state guarantee, senior Notes must have previously obtained a credit rating, assigned by an External Credit Assessment Institution ("ECAI") accepted by the European Central Bank as at 1 January 2016, of not lower than investment grade. If, under applicable law, the release of two assessments of creditworthiness is required, the second assessment on the same senior Note can be issued by an ECAI registered pursuant to Regulation (EU) 1060/2009 regulation (EC) no. 1060/2009 of the European Parliament and the Council of 16 September 2009, and must also not be lower than investment grade.

2. The assessment of credit worthiness, in any case not lower than investment grade, may, alternatively, be private and solely addressed to the Ministry of Economy and Finance, to be understood as buyer and sole recipient for the purposes of Article 2 of Regulation (EU) 1060/2009 of the European Parliament and the Council of 16 September 2009. In this case, the rating agency, chosen from those accepted by the European Central Bank as at 1 January 2016, and proposed by the selling bank originator, is approved by the Ministry of Economy and Finance. The fee due to the rating agency shall be paid by the selling bank originator or by the assignee company.

3. The assignee company undertakes not to request any revocation of the rating received from the ECAIs involved until the principal of the senior Notes has been repaid in full.

4. The servicer entity appointed for the collection of the non-performing assigned receivables (NPLs servicer) must be different from the selling bank originator and must not belong to the same banking group. The decision (if any) of either the originator or the holders of the Notes to revoke the assignment of such entity shall not cause a downgrading of the senior Note rating by the ECAI.

Art. 6

(Characteristics of senior Notes and mezzanine Notes)

1. The senior Notes and, if issued, the mezzanine Notes, shall have the following characteristics:

a) a floating rate remuneration;

b) the repayment of principal before the maturity date is linked to the cash flows deriving from the recoveries and collections arising from the portfolio of assigned receivables, net of all costs arising from the activities of recovery and collection of assigned receivables;

c) the payment of interest is made quarterly, semi-annually or annually in arrears and depends on the outstanding nominal value of the note at the beginning of the relevant interest period.

2. Provision may be made for the remuneration of the mezzanine Notes, being deferred under certain conditions or subordinated to the full repayment of the principal of the senior Notes or dependent on performance targets in the collection or recovery in relation to the portfolio of assigned receivables.

Art. 7

(Order of priority of payments)

1. The amounts deriving from recoveries and collections made in relation to the portfolio of assigned receivables, from the executed financial hedging agreements and from the drawdowns of the credit facility, net of the amounts withheld by the NPL servicer entity appointed for the collection of the assigned receivables for its management activity according to the terms agreed with the assignee company, are used, in the payment of the following items, according to the following order of priority:

    1. taxes (if any);

    2. amounts due to services providers;

    3. payment of the amounts due by way of interest and fees in connection with the activation of the credit facility referred to in Article 4, paragraph 1, letter f);

    4. payment of the amounts due in respect of the granting of state guarantee on the senior Notes;

    5. payment of the amounts due to counterparties of financial hedging agreements;

    6. payment of the amounts due by way of interest on the senior Notes;

    7. replenishment of the credit facility, if drawn;

    8. payment of the amounts due by way of interest on the mezzanine Notes (if issued);

    9. repayment of the principal of the senior Notes until full repayment of such notes;

10. repayment of the principal of the mezzanine Notes until full repayment of such notes;

11. payment of the amounts due as principal and interest or other form of remuneration on the junior Notes.

1-bis. Provision may be made for the payments set out under numbers 2) and 5) of paragraph 1 above, to be dependent on performance targets relating to the collection or recovery of assigned receivables or, subject to the satisfaction of certain conditions, subordinated to the repayment in full of the principal of the senior Notes.

Art. 8

(State guarantee)

1. The state guarantee is against remuneration, can be granted exclusively on the senior Notes and becomes effective only when the selling bank originator has transferred for consideration at least 50% plus 1 of the junior Notes and, in any case, an amount of junior Notes and, if issued, mezzanine Notes, which allows the de-recognition of the securitized receivables from the balance sheet of the selling bank originator and, on a consolidated level, of the selling banking group, pursuant to the relevant accounting principles in force in the year in which the transaction occurs.

2. The state guarantee referred to in paragraph 1 is an unconditional, irrevocable and first demand guarantee for the benefit of the holder of the senior Notes. The guarantee covers the contractually scheduled payments, in relation to principal and interest, and is in favour of the holders of the senior Notes for their entire duration.

3. The State, public authorities and companies controlled, directly or indirectly, by public authorities cannot purchase junior or mezzanine Notes issued in the context of securitisation transactions in relation to which the State guarantee set out under Article 3, paragraph 1, has been requested.

Art. 9

(State guarantee fee)

1. For the purposes of determining the state guarantee fee, reference is made to three CDS Baskets defined as the Basket of credit default swaps (CDS) relating to individual Italian issuers whose assessment of the creditworthiness, as released by S&P, Fitch Ratings or Moody's, as at the date of entry into force of this decree, is equal to:

    i. BBB/Baa2, BBB-/Baa3 or BB/Ba1 for the first Basket, used if the rating of the senior Notes is BBB-/Baa3/BBB-/BBB L;

    ii. BBB/Baa1, BBB/Baa2, or BBB-/Baa3 for the second Basket, used if the rating of the senior Notes is BBB/Baa2/BBB/BBB;

    iii. BBB/Baa2, BBB/Baa1 or A-/A3 for the third Basket, used if the rating of the senior Notes is BBB/Baa1/BBB/BBB H.

2. In the event that the senior Notes have received more than one rating, for the purposes of the identification of the Basket, the lowest rating is taken into account. The composition of the CDS Baskets is indicated in Annex 1 to this decree. If the assessment of the creditworthiness of one of the issuers herein considered is amended so as to no longer fall in the ratings above set out under paragraph 1, the issuer will be excluded from the CDS Basket.

3. The guarantee is granted on payment of an annual fee determined by market conditions based on the following methodology, as detailed in the formula referred to in Annex 2 to this decree:

a) the value of the price of each CDS included in the CDS Basket of reference is determined, and is defined as the average of the daily prices at mid-market, or, in the absence of this, at as the average of the daily bid and ask prices, relating to the six months preceding the date on which the grant of the guarantee has been requested, calculated using data extrapolated from the Bloomberg platform, using the CMAL source (CMA London);

b) the simple average of the individual CDS prices included in the CDS Basket of reference is determined, and is calculated as specified in paragraph a) above;

c) the annual fee of the guarantee is calculated on the outstanding amount of the senior Notes at the beginning of the interest payment period and is paid with the same modality of the interest of the senior Notes, pursuant to Art. 6, paragraph 1, letter c), and is equal to:

d) for the first three years, the simple average of the prices of individual three-year CDS calculated as specified in paragraphs a) and b) above;

e) for the next two years, the simple average of the prices of individual five-year CDS calculated as specified in paragraphs a) and b) above;

f) for the following years, the simple average of the prices of individual seven-year CDS calculated as specified in paragraphs a) and b) above;

g) the annual fee of the guarantee must be increased by an additional amount equal to:

   (i). 2.70 times the difference between the average referred to in subparagraph c), ii) and the average referred to in subparagraph c, i), for the fourth and fifth year, in the event that the senior Notes are not fully repaid by the end of the third year;

   (ii). 8.98 times the difference between the average referred to in subparagraph c), iii) and the average referred to in subparagraph c, ii), for the sixth and seventh year, in the event that the senior Notes are not fully repaid by the end of the fifth year.

4. The Minister of Economy and Finance may, by decree, amend the calculation criteria, the measure of the commissions contained in this Article and the source of data referred to in paragraph 3, letter a), in accordance with the decisions of the European Commission. Amendments shall not affect existing transactions.

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Art. 10

(Admission to the guarantee)

1. The guarantee is issued by decree of the Minister of Economy and Finance upon documented request of the selling bank originator to be filled with the Ministry of Economy and Finance.

Art. 11

(Enforcement of the guarantee)

1. The State guarantee may be enforced by the holder of the senior Notes within nine months following the maturity of such Notes, upon the failure to make any payment, partial or otherwise, of the amounts due as principal or interest in compliance with the mandatory terms set out in this Article. In the event that the failure to pay lasts for sixty days from the expiry of the deadline for the fulfilment, the holders of the senior Notes, with the agreement and also through the representative of the noteholders (RON), shall send to the assignee company a request for the payment of any amount due and unpaid; after thirty days and within six months from the date of receipt of the request letter to the assignee company if payment remains outstanding, the holder of the senior Notes, with the agreement and also through the representative of the noteholders (RON), may request the intervention of the state guarantee.

2. Within thirty days from the receipt of the documented request of the enforcement of the state guarantee, the Ministry of Economy and Finance shall pay the amount to the holders of the senior Note in compliance with the terms and the amount originally set out in the securitisation transaction documents which have not been paid by the originator, without any further interest or costs.

3. By making the relevant payment, the Ministry of Economy and Finance is subrogated to the rights of the holders of the senior Notes and shall, subject to the contractual limitations provided for the exercise of such rights and subordinated to the payment of any amount due as interest to the holders of the senior Notes, recover the amount paid, the interest at the legal rate accrued from the payment date to the redemption date and the costs incurred for the recovery, also by way of the registration procedure in the register, pursuant to the Decree of the President of the Republic No. 602 of 29 September 1973 and the Legislative Decree No. 46 of 26 February 1999, as amended. Such amounts shall be paid to the special account referred to in Article 12.

Art. 12

(Financial funds)

1. For the purposes of this Chapter, a specific fund with a budget of Euro 120 million in respect of the year 2016 has been established within the Ministry of Economics and Finance. This fund is further financed with the annual fees of the granted guarantees which are paid for such purpose on the entry of the State balance sheet for the following reassignment to the Fund. Such amounts are paid on special accounting secured for the payment related to the enforcement (if any) of such guarantees, as well as for the additional costs in connection with the implementation of this Chapter, deriving from 3, paragraph 3 and Article 13, paragraph 1.

2. In relation to the cost referred to in paragraph 1, provision is made for a corresponding reduction of the budget of the fund referred to in Article 37, paragraph 6, of Law Decree No. 66 of 24 April 2014, converted with amendments by Law No. 89 of 23 June 2014.

Art. 13

(Implementing provisions)

1. The Ministry of Economy and Finance may use, pursuant to Article 19, paragraph 5, of Law Decree No. 78 of 1 July 2009, as converted, with amendments, by the law no. 102 of 3 August 2009, as converted with amendments, by the law no. 102 of 3 August 2009, a wholly public owned company for the management of the intervention.

2. The implementing provisions of this Chapter may be adopted within sixty days from the date of entry into force of the conversion law of this decree by a non-regulatory decree of the Minister of Economy and Finance.

Art. 13-bis

(Supervision of asset-backed securities)

1. The words: (<<paragraphs 1, 2, 3, 4, 5 and 7, and 7-ter, paragraph 1>> of Article 7-quarter of the law no. 130 of 30 April 1999, are replaced by the following: (<<paragraphs 1, 2, 3, 4, 5, 6 and 7, and 7-ter, paragraph 1>>.

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GACS Decree no. 18/2016

(Decree of the Ministry for the Economy and Finance (Italian Treasury) containing implementing regulations for the State guarantee scheme for non-performing loans (GACS) under Article 13 of the Law Decree no. 18 of 14 February 2016 converted into law with amendments by article 1(1) of law no. 49 of 8 April 2016).

The Italian Treasury

Considering Law 130 of 30 April 1999 concerning "Provisions for loan securitisation";

Considering Title II of Law Decree no. 18 of 14 February 2016 converted into law with amendments by article 1(1) of law no. 49 of 8 April 2016 containing the rules in relation to the guarantee for non performing loan securitisations (GACS);

Considering inter alia article 13(1) of such law decree that specifies that the Italian Treasury Minister may set up a wholly-publicly owned entity for the management of the programme under Article 19(5) of law decree no. 78 of July 1st 2009, converted with amendments by law no. 102 of August 3, 2009;

Considering article 13(2) of the same law decree which provides that implementing provisions relating to Title II of such law decree can be adopted by way of non-regulatory decree of the Italian Treasury within 60 days of the conversion law;

Considering that, pursuant to article 192(2) of the law decree no. 50 of 18 April 2016, the Italian Treasury has appointed CONSAP as in-house entity being the most appropriate entity for such role, having considered its organisational structure, professional attributes, experience in similar processes and also its efficiency, value-for-money, and quality in terms of services provided;

Hereby decrees:

Article 1

(Definitions)

1. In this decree the following definitions apply:

a) "Banks" means banks with registered office in Italy and registered pursuant to article 13 of legislative decree no 385 of September 1 1993;

b) "Law Decree" means law decree no. 18 of February 14 2016, converted with amendments into law by article 1(1) of law no 49 of 8 April 2016;

c) "Manager" means CONSAP S.p.A., being a wholly publicly-owned company used by the Italian Treasury pursuant to article 19(5) of law decree no. 78 of July 1 2009 converted with amendments by law 102 of August 3 2009 for the management of the Fund by way of specific regulation to be signed by way of acceptance by CONSAP S.p.A.;

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d) "Financial Intermediaries" means financial intermediaries with registered office in Italy and registered pursuant to article 106 of legislative decree no. 385 of September 1 1993;

e) "Treasury" means the Italian Ministry for the Economy and Finance;

f) "Securitisation Company" means a securitisation company incorporated under law 130 of 30 April 1999, as transferee of receivables and issuer of Senior Notes benefiting from the guarantee, or the issuer of the Senior Notes, where different from the transferee under law 130 of April 30 1999.

g) "Originators" Banks or Financial Intermediaries as sellers of pecuniary receivables including claims arising under leasing contracts classified as non-performing.

h) "Independent Entity" means the independent entity named by the Treasury following approval by the European Commission under article 3(3) of the Law Decree.

Article 2

(Transaction structure)

2. In accordance with the Law Decree, for a securitisation transaction to qualify for the guarantee it shall have the following characteristics:

a) the receivables to be securitised shall be transferred to the Securitisation Company for an aggregate amount does not exceed the aggregate gross book value, net of adjustments and that includes any collections generated by such receivables and belonging to the Securitisation Company and received by the Bank between the accounting reference date and the date of transfer as evidenced by the Originator on the basis of its accounting records;

b) the securitised receivables shall be classified and registered as non-performing (in sofferenza) on a date preceding the transfer to the Securitisation Company.

Article 3

(Senior Notes)

1. Pursuant to Article 4 of the Law Decree, Senior Notes are those of a class that is not subordinated to other classes in such issuance. A class of Notes is considered as non-subordinated to another class of the same issuance if, in compliance with the post-enforcement priority of payments and, if applicable, the post-acceleration priority of payments, as set out in the terms and conditions of the notes, no other class shall be given priority over that class in respect of receiving payments of principal or interest.

2. If more than one class of Senior Notes is issued, the State guarantee may be requested in respect of one or more than one tranche of Senior Notes.

Article 4

(Order of priority of payments)

1. Amounts deriving from recoveries and collections in relation to the pool of receivables transferred shall be utilized to pay amounts due to the noteholders and other costs and fees relating to the transaction.

2. Starting from the application of the priority of payments following the occurrence of an event triggering an enforcement (post-enforcement priority) or, where applicable an acceleration (post-acceleration priority) as may be specified in accordance with the terms and conditions of the notes and the transaction documents, no payments senior to the Senior Notes shall be made other than those set out in article 7 of the Law Decree.

Article 5

(Transactions qualifying for the guarantee)

1. The terms and conditions of the notes and the transaction documents shall have the following characteristics in order for the same to qualify for the guarantee:

a) the non-payment of an amount owed by way of interest on the Senior Notes or the calling of the guarantee shall not cause the Securitisation Company to go into default;

b) the following changes shall not be made without express Treasury consent:

(i) any change in the nominal amount or principal amount of the Senior Notes;

(ii) an increase in the interest rate applicable to the Senior Notes or, where paid senior to the Senior Notes, in the interest rate applicable to the Mezzanine Notes;

(iii) any change in the maturity date of the Senior Notes;

(iv) any change in the trigger events that gives rise to the rights of Senior Noteholders to declare the Securitisation Company in default or to apply the post-acceleration or post-enforcement priority of payments;

(v) any change in the terms and conditions of the notes or the transaction documents which implicates a rating downgrade of the Senior Notes;

(vi) any change in the terms and conditions of the notes or the transaction documents which are to be made after the calling of the guarantee under article 11 of the Law Decree;

c) the Manager and the Independent Entity shall receive regular updates, by electronic means, of data relating to the progress of transactions that benefit from the State guarantee.

2. In order to benefit from the guarantee:

(i) the rating agency shall have access to at least the following information:

(ii) expected cashflows, including those deriving from hedging contracts;

(iii) commissions payable to the servicer;

(iv) payment methodology of interest on the notes;

(v) the guarantee premium;

(vi) any other securitisation cost;

(vii) amounts relating to the classes of notes other than the Senior Notes

d) the rating agency shall have access to both quantitative and qualitative information related to the servicer appointed for the recovery of the receivables;

e) the Originator shall ensure that the Independent Entity shall receive all information necessary to verify compliance with the rules governing the grant of the guarantee.

3. For the purposes of article 8(1) of the Law Decree transfer for valuable consideration (a titolo oneroso) shall include transfer made in the context of extraordinary transactions involving the Originator provided the other conditions of article 8(1) are complied with.

Article 6

(Petitioners)

1. All Originators in multi-seller securitisations shall jointly make the request for the guarantee.

Article 7

(Application form and procedure for the guarantee)

1. The Originator shall send its application request for the guarantee to the Treasury and the Manager by way of time- stamped electronic communication (PEC) using the relevant form available on the website of the Treasury and the Manager, together with the following documentation:

a) securitisation prospectus and ISIN of the Senior Notes to be guaranteed;

b) terms and conditions of the notes and the transaction documents;

c) rating letter and reports confirming the rating in accordance with rating agency procedures (e.g. new issue reports, pre-sale report etc.);

d) the amount of the guarantee premium calculated as at a date falling no later than the 15th business day prior to the date of the request;

e) a letter of undertaking signed by the legal representative of the Originator to lodge the documentation evidencing the transfer of the Junior Notes (and any Mezzanine Notes) permitting

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the derecognition of the relevant receivables in a timely manner, together with appropriate auditor's certificate;

f) a letter of undertaking signed by the legal representative of the Originator relating to notifying the Manager of any changes to the terms and conditions of the notes or transaction documents.

2. Applications on forms not compliant with paragraph 1 or not signed by the legal representative of the Originator shall not be considered.

3. The Manager shall assess each application's compliance with the State guarantee requirements set out in the Law Decree and this decree within 15 working days and in chronological order of receipt. The result of the assessment shall be notified as soon as practicable to the Treasury in order for it to approve the Treasury's decree for the granting of the State guarantee.

4. The effectiveness of the guarantee is conditional upon the transfer referred to in article 8(1) of the Law Decree. In the event the conditions set out in article 8(1) are not met within 12 months of the date on which the decree granting the State guarantee is approved, the Originator shall no longer require the benefit of the guarantee and the application must be re-submitted.

5. The Manager shall send a copy of the application form and supporting documentation to the Independent Entity for the purposes of article 3(3) of the Law Decree.

Article 8 (Unenforceability of the guarantee)

1. Subject as provided by the law, and subject to the Treasury's rights as against the Bank where the guarantee has been granted on the basis of acts or representations which are untrue, misleading or incomplete, the guarantee shall become unenforceable in the following cases:

a) if a decision of the Securitisation Company or the noteholders to dismiss the servicer results in the Senior Notes being downgraded by the ECAI;

b) if the terms and conditions of the notes or the other transaction documents have been amended not in compliance with the Law Decree and this decree.

2. The unenforceability of the guarantee shall be set out in a decision of Treasury in accordance with law no 241 of 1990, taking into account the report of the Manager.

This decree shall be notified to all relevant supervisory bodies and published in the Official Gazette of the Republic of Italy.

Rome, 20 April 2017

PART C

(Bank of Italy and European Central Bank publications)

BANCA D'ITALIA

EUROSISTEMA

Questioni di Economia e Finanza

(Occasional Papers)

The management of non-performing loans: a survey among the main Italian banks

by Luisa Carpinelli, Giuseppe Cascarino, Silvia Giacomelli and Valerio Vacca

February 2016

Number 311

1. Abstract[7]

In 2015, the Bank of Italy carried out an investigation into the effectiveness of procedures for recovering corporate loans in 25 major banking groups.

The survey was motivated by the sharp increase of NPLs in the Italian banks' balances, which - at the end of the third quarter of 2015 (last available information) - amounted to approximately 340 billion, equal to 18.7% of the total loans. Slightly less than 273 billion of deteriorated loans is against companies and 58% consists of overdue debts.

The ability of intermediaries to balance their budgets within a reasonable time depends heavily on the efficiency of recovery procedures.

Following this survey, in February 2016, the Bank of Italy published the results, the synthesis of which is provided herein below.

The paper published by the Bank of Italy is entitled: "The management of NPLs: an investigation on major Italian banks". The authors are the following employees of the Bank of Italy: Luisa Carpinelli, Giuseppe Cascarino, Silvia Giacomelli and Valerio Vacca.

2. Synthesis

2.1. Introduction

The main results of the investigation can be summarized as follows.

The recovery rate of liquidation within the average for the period 2011-14 was slightly higher than 40%, on the basis of undiscounted amounts and a dispersion of values among the different banking groups. The persistence of the crisis has dramatically reduced the ability to increase business activities on the market, and - from 2011 to 2014 - the recovered percentages have been reduced for all procedures. Recoveries are achieved almost entirely within five years from the opening of the liquidation, irrespective of the length and type of legal proceedings (bankruptcies, compositions with creditors or positions primarily concerned with real estate executions).

Reorganizations take a relatively long period before evolving in recovery or liquidation of the company: four years after their launch, 62% of the reorganizations is still in progress. The transformation into liquidation involves 23% of the loans; the return to a financial stable situation and the acquisition or incorporation of the company by other companies concerns the remaining 15%.

Liquidations and reorganizations can be distinguished by their duration and by the usual amount of credit secured by guarantees: considering the procedures in progress at December 31, 2014, liquidations have been open for approximately 3.5 years, reorganizations for 1.8 year; the average age has probably been lowered by the significant growth of the number of procedures initiated in recent years as a result of the crisis. On average, reorganizations are secured by collateral security for about 50% of the credit, eight

[7] This is an abstract of the publication of the Bank of Italy. The views expressed are those of the authors and do not involve the Bank of Italy. The following experts took part to the study: Giacomo Rodano and Gennaro Sansone.

percentage points more than liquidations: debtors' availability to reach agreements that preserve the company's ongoing activities appears therefore superior with guarantees of significant value.

In 2014, the management of NPLs absorbed 2.8% of operating costs of the banks. NPLs were mainly managed through transfer of receivables to third parties or through internal structures appointed with such activity. Banks organizational structures for management of NPLs are diversified. Some groups have specialized organizational units, which are focused on liquidations' and reorganizations' management; others have more fragmented structures. The banking aggregations that occurred in the years preceding the crisis are at the origin of current arrangements and affect the availability of an integrated information system. This last element appears to have consequences also on the different degree of responsiveness of banks to the questions of the survey, which in some cases was noticeably higher than the average.

The significant impact of NPLs management on banks' costs is also due to the poor efficiency of legal proceedings. Banks identified the overloading of judicial offices and the complexity of procedures as the main obstacles to an effective credit recovery. Reorganizations would be mainly hampered by the difficulty of delivering new funds, experts' costs, and by the difficulties of coordination with non-financial creditors. Important measures have been taken in the summer of 2015 in order to improve the institutional framework for the management of NPLs that address some of these aspects.

2.2. The recourse to different procedures and their features

The sample of banks provided information on 240,000 positions of companies affected by liquidation procedures at the end of 2014, with an exposure of 95 billion of euros (Figure 1), equal to 78% of their overdue debts for corporate loans.

Over 90% of reported loans relates to liquidations that take place in judicial proceedings; the remaining 10% is related to out-of-court agreements. The latter aspect should not be interpreted as representing a reduced use of the out-of-court means compared with the judicial ones. Considering legal proceedings, bankruptcies represent about half of the total value of reported amounts, while the weight of the compositions is far below the one of property executions. The average amount of insolvency procedures (bankruptcies and compositions with creditors) is higher than the individually based liquidation ones (property executions; Figure 2).

Sample banks reported debt reorganizations of 21,000 positions, totalling $ 33.4 billion (Figure 2). During the investigation period, the bankruptcy law provided for three different judicial remedies: restructuring plans, restructuring agreements and compositions with creditors. These instruments differ primarily due to the degree of involvement of the judicial authority that corresponds to a more complex procedure, and due the applicability of the agreements' content to those creditors who do not adhere to them. These three restructuring procedures, despite involving less than a fifth of debiting companies, represent 57% of the volume of loans subject to reorganization; the most commonly used procedure is the reorganization plan.

The average amount of legal proceedings (about 5 million) is much higher than the out-of-court proceedings (about 900 thousands euros). This is likely to reflect the fact that judicial procedures provide stronger legal protection for the involved parties, but entail higher fixed costs and, therefore, are used for significant amount of receivables.

FIGURE 1

Banks NPLs management procedures (1) (*number of positions; millions of euros; percentages*)				
	a) Procedures aimed at liquidation		**b) Procedures aimed at reorganization**	
	Number of positions	Sums (mln/€)	Number of positions	Sums (mln/€)
Total	239.649	94.766	21.106	33.364
whose:				
Out-of-court settlements (2)	56.557	7.960	17.434	14.413
judicial procedures	183.092	86.806	3.672	18.951
Whose (% of judicial proc.)				
- bankruptcies	55,9%	54,1%	–	–
- compositions with creditors (3)	11,8%	24,6%	21,3%	7,6%
- property executions	32,2%	21,3%	–	–
- reorganization agreements	–	–	18,4%	26,4%
- restructuring plans	–	–	60,3%	66,0%

(1) Only some of the participating banks provided information that would allow distributing all procedures between the different categories; accordingly, values for individual procedures are calculated on a sample smaller than the total. – (2) Out-of-court restructuring agreements are agreements between banks and companies aimed at rebalancing the company's financial structure and restoring a regular repayment; they typically consist in the extension of the amortization plan for mortgages and loans. – (3) The compositions with creditors are addressed in the two sections in relation to the liquidation or restructuring purpose. – (4) In the absence of insolvency procedures, the sums relate to the overall position of the debtor and may not coincide with the recoverable credit through the process of execution.

FIGURE 2

Average amount of NPLs per procedure (1) (*Euros*)		
	a) Procedures aimed at liquidation	**b) Procedures aimed at reorganization**
Total	395.435	1.580.764
whose:		
Out-of-court settlements (2)	118.249	913.433
- judicial procedures	397.792	5.168.628
- bankruptcies	450.073	–
- compositions with creditors (3)	964.403	2.043.368
- property executions (4)	308.021	–
- reorganization agreements	–	8.224.091
- restructuring plans	–	6.214.017

(1) The average amounts of positions subject to the individual procedures may not correspond to the frequency of their use. Indeed, only the data of banks that had responded to all the procedures (see Figure 1) were used to calculate usage frequencies. - (2) Out-of-court restructuring agreements are agreements between banks and companies aimed at re-balancing the company's financial structure and restoring a regular repayment; typically, they consist in the extension of the amortization plan for mortgages and loans. – (3) The compositions with creditors are addressed in the two sections in relation to the liquidation or restructuring purpose. – (4) In the absence of insolvency procedures, the sums relate to the overall position of the debtor and may not coincide with the recoverable credit through the execution procedure.

2.3. The age of procedures

Figure 3 shows the distribution by year of the ongoing procedures at the end of 2014. The average age is probably lowered by the strong growth in the number of procedures initiated in recent years as a result of the crisis.

Almost 80% of the funding involved in liquidation is affected by procedures initiated for less than five years; almost 60% for less than three years. It can be estimated that the average age of liquidations in progress, amount weighted, at the end of 2014, was about 3.5 years; the estimated age of bankruptcies is 3.8 years, that of the composition is 2.9 and that of the execution procedures is 3.3.

Restructuring operations have an average age of 1.8 year, half of that of liquidation. Almost 90% of credit volumes are involved in operations started within a period of three years; almost 40% within a year.

FIGURE 3

The age of credit liquidation procedures at the end of 2014 (*percentage values*)				
Total procedures of judicial liquidation whose:				
	Insolvency procedures	*Compositions with creditors*	*Property procedures*	
(a.1) Allocation by number of positions				
< 1 year	13,9	11,4	15,8	15,8
1-3 years	33,9	30,2	38,0	38,0
3-5 years	22,2	24,0	20,4	20,4
5-8 years	16,7	17,1	17,6	17,6
8-10 years	4,9	6,2	3,4	3,4
> 10 years	8,3	11,1	4,7	4,7
(a.1) Allocation by sums				
< 1 year	16,0	13,2	20,7	17,6
1-3 years	40,5	38,3	45,5	40,9
3-5 years	22,5	24,5	18,6	22,1
5-8 years	14,0	14,8	12,0	14,5
8-10 years	2,2	2,8	1,2	1,8
> 10 years	4,6	6,4	2,0	3,1

3. Recovery procedures: critical aspects

The survey reported the views of banks on the factors that negatively affect the functioning of the liquidation procedures and of the restructuring instruments.

3.1. Liquidation procedures and restructuring instruments

With regard to bankruptcies, the most important aspect in determining the protracted timing of the expected recovery is the workload of the judicial offices, with a score of 7.7 on a scale of 1 to 10. The second aspect that has to be considered is the inadequacy of the skills of the involved experts, followed by the complexity

of the procedures. Even with regard to real estate enforcement proceedings, the most relevant factor in terms of duration is the workload of the judicial offices. The third main factor is the prevalence of practices more favourable to the debtor in the management of the procedures. Concerning compositions for liquidation purposes, the most important aspects in determining recovery timing are the complexity of the procedures and the overwork of the judicial offices.

The main obstacles to the use of restructuring instruments indicated by banks are the high cost of the experts involved, the unavailability of interim finance, as well as the difficulties of coordination with non-financial creditors (employees and providers). Less weight is attributed to the problems of coordination between banks and the involvement of the public sector.

4. Conclusions

As a consequence of the considerable length of the procedures, especially for bankruptcies, the information collected on the timing frame for recovery of credits shows that almost all of the recoveries take place within the first five years; there is no clear evidence that extending the procedures over a certain period will increase its effectiveness. These results suggest, on the one hand, the need for interventions that reduce the length of proceedings; on the other hand, the opportunity for regulatory amendments to facilitate their closing once the substantial economic effect has been achieved. This path has already been undertaken with the summer 2015 measures and could be usefully adopted.

With regard to individual recovery instruments, interesting indications emerge from the composition with creditors. Despite the reforms that have taken place since 2005 and that focused to highlight its role of restructuring, this instrument continues to be mainly used for liquidation purposes. It plays a significant role in the liquidation process and the recovery rates obtained by banks with the composition are slightly higher than those obtained with the bankruptcy procedure. The use of instruments chosen by the parties, supervised by the courts for risking default companies' liquidation is, however, envisaged in many jurisdictions. Among restructuring instruments, instead, risking defaults composition is used less often than other options provided by Italian legislation and is less effective.

More generally, the survey reveals that reorganization transactions are rarely effective: in most cases, they are still in place four years after their beginning. This suggests that attempts to preserve the continuity of business experiencing temporary difficulties require a long time, but could also indicate a dilatory use of debt restructuring instruments.

Finally, the survey confirmed the importance of the availability of adequate information with regard to the phenomenon. The quality of bank replies has sometimes been affected by the lack of an integrated information system on NPL's management. This situation seems to be improving, as some groups have recently equipped themselves with information systems that can handle data on different procedures in an integrated way and according to standard criteria. In a long term perspective, the systematic creation of databases and the timely availability of information on NPL's appears to be crucial for their "active" management and to negotiate the relative transfer to third parties.

ECB Guidance to banks on non-performing loans, dated March 2017

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Non-performing loans in Greece

Background

The purpose of this paper is to offer a brief overview of the measures adopted in Greece to address the issue of non-performing loans (**NPLs**), also in light of the ongoing assessment by the IMF and the European Stability Mechanism.

On 6 February 2017, the Executive Board of the International Monetary Fund (**IMF**) completed the Article IV Consultation with Greece. The IMF stated in its Staff Report that Greece has reached important goals in settling political and economic imbalances during the past years; nonetheless, development is still too slow and investment risks remain high. While the new ESM supported program has helped stabilize the economic situation, the underlying issues hindering the recovery have not yet fully addressed.

In particular, the IMF called for decisive action needed to repair the bank and private sector balance sheets, to return to sustainable credit growth, and expressed concern that without reducing NPLs rapidly, banks will not be able to provide new lending to viable firms, hence slowing down the recovery.

The issue of non-performing loans in Greece was already addressed in detail in the context of the financial assistance programme entered into with the European Stability Mechanism (**ESM)** in August 2015. In the Memorandum of Understanding (**MOU**) signed by Greece and the ESM, the authorities were requested to finalize a comprehensive strategy for the financial system, which included legislative reforms to facilitate the reduction of the stock of non-performing loans in Greece.

The legislative measures introduced in Greece

As part of the deliverables under the ESM programme, the Greek Parliament introduced Law 4354 which entered into force on 16 December 2015 (as subsequently amended, the **NPL Law**), which set forth new rules for the sale and management of non-performing loans.

Subsequent amendments to the Law introduced in 2016 have broadened the scope of the law, extending its application to various types of loans (Law 4393/2016), and introducing provisions for the tax treatment of the management and sale of the loans (Law 4389/2016).

Furthermore, the Bank of Greece (**BoG**) issued implementing provisions to the NPL Law with the Executive Committee Act, (ECA 82/2016, as further amended, **BoG Act**), which specifies the licensing and regulatory regime for non-bank servicers and companies that are acquiring NPLs.

The NPL Law framework aims at the creation of a secondary market for non-performing loans in Greece. In particular, the NPL Law sets forth requirements for the establishment and operation of companies purchasing NPLs and servicing companies managing the loans. The Bank of Greece supervises and regulates the activities, as the competent licensing authority under the NPL Law.

Purchase and management of NPLs under NPL Law

NPLs are usually managed internally by the banks through dedicated units. This strategy has resulted to be ineffective to increase the recovery of the non-performing loans. Therefore, transfer of NPL portfolios to special purpose entities and external management of the NPLs has become a pillar of the NPL Law.

Two types of companies are deemed to be eligible to undertake respectively the activity of acquiring and servicing non-performing loans, which was previously limited to banks and financial institutions: (1) Asset Acquisition Company (**AAC** or **Purchaser**), and (2) Asset Management Company (**AMC** or **Servicer**).

The NPL Servicers

Companies that intend to act as Servicer of NPLs under the NPL Law, must satisfy the main following requirements:

(i) established either in Greece (under the legal form of société anonyme), with the sole purpose of servicing loans, or in another EEA member state and operating in Greece through a branch that has as its purpose the servicing of loans; (ii) with registered shares, and a minimum share capital of Euro 100,000; (iii) listed in the General Commercial Registry.

Furthermore, Servicers need to acquire a special operating license granted by the Bank of Greece. The specific provisions and requirements for the licensing procedure are set forth in the NPL Law and in the BoG Executive Committee Act of 95/2016 (which replaced BoG Act 82/2016), which sets forth the supporting documents that the prospective servicer must submit to the BoG, including *inter alia*, extensive disclosure of information regarding the company, its beneficial owners and the company's directors and managers; the company's organizational structure; and a business plan presenting the company's strategy. Approval is granted by the BoG upon satisfactory evidence of the company's capability and suitability to carry out the business strategy.

The NPL Purchasers

The NPL Law does not include particular licensing requirements for companies intending to purchase NPLs. An Asset Acquisition Company must satisfy the following basic requirements:

(i) a company must be established either in Greece as a Greek company under the form of société anonyme, or as a company established in another EEA member state, operating through a subsidiary, having as business purpose the acquisition of loans; (ii) such companies must have signed a loan servicing agreement with a Servicer legally licensed and supervised by the BoG.

Furthermore, the offer of sale for NPLs (with certain exceptions) is conditioned upon the delivery of a notice to the relevant debtor and any guarantor to settle their debts at least twelve (12) months prior to the sale. The sale of the claims must also be registered in a public registry and is effective upon registration, and notified to the relevant debtors. The position of the debtor should not be worsened due to the servicing or transfer of the loan.

Further developments

In December 2016, in order to provide further impetus to the implementation of the NPL Law, the Greek Parliament introduced extensive amendments to the Bankruptcy Code, in order to facilitate, inter alia, pre-bankruptcy arrangements with creditors.

Conclusions

According to the IMF Staff Report, "without reducing NPLs rapidly, banks will not be able to provide new lending to vibrant firms, putting the recovery in jeopardy". Therefore, the IMF has called for the Bank of Greece, together with the Single Supervisory Mechanism, to set ambitious NPL targets and monitor banks'

strategies and performance against these targets. On the other hand, as with other countries where the NPL stock is significant, an effective reform process of the enforcement system is an important incentive for the purchase and recovery non-performing loans. Therefore, in order to be able to develop an effective secondary NPL market, the reform process should continue in Greece, introducing other measures, such as out of court debt restructuring and fully implementing the insolvency and debt-enforcement framework.

PART B

(Courtesy translation of the Italian laws)

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GACS Conversion Law no. 49/2016

Chapter II - Guarantee on the securitisation of Non-Performing Loans (GACS)

Art. 3

(Scope)

1. In accordance with the criteria and the conditions set forth in this Chapter, for a period of eighteen months from the date of entry into force of this decree, the Minister of Economy and Finance is authorised to grant the State guarantee on liabilities issued in the context of securitisation transactions pursuant to Article 1 of Law No. 130 of 30 April 1999, against the transfer from banks and from financial intermediaries enrolled in the register set out under Article 106 of the legislative decree 1 September 1993, no. 385, hereinafter denominated "originators" with a registered office in Italy of monetary receivables, including receivables deriving from lease contracts, classified as non-performing.

2. The Minister of Economy and Finance may, with the prior approval of the European Commission, extend the period referred to in paragraph 1, up to a maximum of a further eighteen months.

3. The Ministry of Economy and Finance, within three months following the positive decision by the European Commission of the state guarantee scheme referred to in paragraph 1, shall appoint, subject to the approval of the latter, a qualified independent party which shall monitor the compliance of the state guarantee with the provisions of this chapter and with the decision of the European Commission referred to in paragraph 1. In relation to any related charges, within a maximum limit of Euro 1 million for each of the years 2016 to 2019, provision is made for the special funding resources referred to in Article 12 to be relied on.

Art. 4

(Structuring of the securitisation transaction)

a) Notwithstanding the provisions of Article 2 of Law No. 130 of 30 April 1999, the securitisation transactions referred to in this Chapter shall have the following features:

b) the assigned receivables shall be transferred to the assignee company for an amount no higher than their net book value as at the transfer date (gross value net of adjustments);

c) the securitisation transaction provides for the issuance of notes (the "Notes") of at least two different classes, in consideration of the degree of subordination in the absorption of losses;

d) the most subordinated class of Notes, called "junior", has no right to receive repayment of principal, payment of interest or other form of remuneration until the full repayment of the principal of the Notes of the other classes;

e) one or more classes of Notes, called "mezzanine", can be issued, which, with regard to the payment of interest, are subordinated to the payment of interest due to the class of Notes called "senior" and shall be paid in priority to the repayment of principal of the senior Notes;

f) provision may be made for the entering into financial hedging agreements with market counterparties in order to reduce the risk arising from asymmetries between the interest rates charged on assets and liabilities;

g) in order to manage the risk of any mismatch between the funds deriving from collections and recoveries made in relation to the portfolio of assigned receivables and the necessary funds to pay the interest on the senior Notes, provision may be made for the execution of a credit facility for an amount sufficient to keep the minimum level of financial flexibility consistent with the creditworthiness of the senior notes.

Art. 5

(Rating)

1. For the purposes of issuing the state guarantee, senior Notes must have previously obtained a credit rating, assigned by an External Credit Assessment Institution ("ECAI") accepted by the European Central Bank as at 1 January 2016, of not lower than investment grade. If, under applicable law, the release of two assessments of creditworthiness is required, the second assessment on the same senior Note can be issued by an ECAI registered pursuant to Regulation (EU) 1060/2009 regulation (EC) no. 1060/2009 of the European Parliament and the Council of 16 September 2009, and must also not be lower than investment grade.

2. The assessment of credit worthiness, in any case not lower than investment grade, may, alternatively, be private and solely addressed to the Ministry of Economy and Finance, to be understood as buyer and sole recipient for the purposes of Article 2 of Regulation (EU) 1060/2009 of the European Parliament and the Council of 16 September 2009. In this case, the rating agency, chosen from those accepted by the European Central Bank as at 1 January 2016, and proposed by the selling bank originator, is approved by the Ministry of Economy and Finance. The fee due to the rating agency shall be paid by the selling bank originator or by the assignee company.

3. The assignee company undertakes not to request any revocation of the rating received from the ECAIs involved until the principal of the senior Notes has been repaid in full.

4. The servicer entity appointed for the collection of the non-performing assigned receivables (NPLs servicer) must be different from the selling bank originator and must not belong to the same banking group. The decision (if any) of either the originator or the holders of the Notes to revoke the assignment of such entity shall not cause a downgrading of the senior Note rating by the ECAI.

Art. 6

(Characteristics of senior Notes and mezzanine Notes)

1. The senior Notes and, if issued, the mezzanine Notes, shall have the following characteristics:

a) a floating rate remuneration;

b) the repayment of principal before the maturity date is linked to the cash flows deriving from the recoveries and collections arising from the portfolio of assigned receivables, net of all costs arising from the activities of recovery and collection of assigned receivables;

c) the payment of interest is made quarterly, semi-annually or annually in arrears and depends on the outstanding nominal value of the note at the beginning of the relevant interest period.

2. Provision may be made for the remuneration of the mezzanine Notes, being deferred under certain conditions or subordinated to the full repayment of the principal of the senior Notes or dependent on performance targets in the collection or recovery in relation to the portfolio of assigned receivables.

Art. 7

(Order of priority of payments)

1. The amounts deriving from recoveries and collections made in relation to the portfolio of assigned receivables, from the executed financial hedging agreements and from the drawdowns of the credit facility, net of the amounts withheld by the NPL servicer entity appointed for the collection of the assigned receivables for its management activity according to the terms agreed with the assignee company, are used, in the payment of the following items, according to the following order of priority:

    1. taxes (if any);
    2. amounts due to services providers;
    3. payment of the amounts due by way of interest and fees in connection with the activation of the credit facility referred to in Article 4, paragraph 1, letter f);
    4. payment of the amounts due in respect of the granting of state guarantee on the senior Notes;
    5. payment of the amounts due to counterparties of financial hedging agreements;
    6. payment of the amounts due by way of interest on the senior Notes;
    7. replenishment of the credit facility, if drawn;
    8. payment of the amounts due by way of interest on the mezzanine Notes (if issued);
    9. repayment of the principal of the senior Notes until full repayment of such notes;

10. repayment of the principal of the mezzanine Notes until full repayment of such notes;

11. payment of the amounts due as principal and interest or other form of remuneration on the junior Notes.

1-bis. Provision may be made for the payments set out under numbers 2) and 5) of paragraph 1 above, to be dependent on performance targets relating to the collection or recovery of assigned receivables or, subject to the satisfaction of certain conditions, subordinated to the repayment in full of the principal of the senior Notes.

Art. 8

(State guarantee)

1. The state guarantee is against remuneration, can be granted exclusively on the senior Notes and becomes effective only when the selling bank originator has transferred for consideration at least 50% plus 1 of the junior Notes and, in any case, an amount of junior Notes and, if issued, mezzanine Notes, which allows the de-recognition of the securitized receivables from the balance sheet of the selling bank originator and, on a consolidated level, of the selling banking group, pursuant to the relevant accounting principles in force in the year in which the transaction occurs.

2. The state guarantee referred to in paragraph 1 is an unconditional, irrevocable and first demand guarantee for the benefit of the holder of the senior Notes. The guarantee covers the contractually scheduled payments, in relation to principal and interest, and is in favour of the holders of the senior Notes for their entire duration.

3. The State, public authorities and companies controlled, directly or indirectly, by public authorities cannot purchase junior or mezzanine Notes issued in the context of securitisation transactions in relation to which the State guarantee set out under Article 3, paragraph 1, has been requested.

Art. 9

(State guarantee fee)

1. For the purposes of determining the state guarantee fee, reference is made to three CDS Baskets defined as the Basket of credit default swaps (CDS) relating to individual Italian issuers whose assessment of the creditworthiness, as released by S&P, Fitch Ratings or Moody's, as at the date of entry into force of this decree, is equal to:

   i. BBB/Baa2, BBB-/Baa3 or BB/Ba1 for the first Basket, used if the rating of the senior Notes is BBB-/Baa3/BBB-/BBB L;

   ii. BBB/Baa1, BBB/Baa2, or BBB-/Baa3 for the second Basket, used if the rating of the senior Notes is BBB/Baa2/BBB/BBB;

   iii. BBB/Baa2, BBB/Baa1 or A-/A3 for the third Basket, used if the rating of the senior Notes is BBB/Baa1/BBB/BBB H.

2. In the event that the senior Notes have received more than one rating, for the purposes of the identification of the Basket, the lowest rating is taken into account. The composition of the CDS Baskets is indicated in Annex 1 to this decree. If the assessment of the creditworthiness of one of the issuers herein considered is amended so as to no longer fall in the ratings above set out under paragraph 1, the issuer will be excluded from the CDS Basket.

3. The guarantee is granted on payment of an annual fee determined by market conditions based on the following methodology, as detailed in the formula referred to in Annex 2 to this decree:

a) the value of the price of each CDS included in the CDS Basket of reference is determined, and is defined as the average of the daily prices at mid-market, or, in the absence of this, at as the average of the daily bid and ask prices, relating to the six months preceding the date on which the grant of the guarantee has been requested, calculated using data extrapolated from the Bloomberg platform, using the CMAL source (CMA London);

b) the simple average of the individual CDS prices included in the CDS Basket of reference is determined, and is calculated as specified in paragraph a) above;

c) the annual fee of the guarantee is calculated on the outstanding amount of the senior Notes at the beginning of the interest payment period and is paid with the same modality of the interest of the senior Notes, pursuant to Art. 6, paragraph 1, letter c), and is equal to:

d) for the first three years, the simple average of the prices of individual three-year CDS calculated as specified in paragraphs a) and b) above;

e) for the next two years, the simple average of the prices of individual five-year CDS calculated as specified in paragraphs a) and b) above;

f) for the following years, the simple average of the prices of individual seven-year CDS calculated as specified in paragraphs a) and b) above;

g) the annual fee of the guarantee must be increased by an additional amount equal to:

   (i). 2.70 times the difference between the average referred to in subparagraph c), ii) and the average referred to in subparagraph c, i), for the fourth and fifth year, in the event that the senior Notes are not fully repaid by the end of the third year;

   (ii). 8.98 times the difference between the average referred to in subparagraph c), iii) and the average referred to in subparagraph c, ii), for the sixth and seventh year, in the event that the senior Notes are not fully repaid by the end of the fifth year.

4. The Minister of Economy and Finance may, by decree, amend the calculation criteria, the measure of the commissions contained in this Article and the source of data referred to in paragraph 3, letter a), in accordance with the decisions of the European Commission. Amendments shall not affect existing transactions.

Art. 10

(Admission to the guarantee)

1. The guarantee is issued by decree of the Minister of Economy and Finance upon documented request of the selling bank originator to be filled with the Ministry of Economy and Finance.

Art. 11

(Enforcement of the guarantee)

1. The State guarantee may be enforced by the holder of the senior Notes within nine months following the maturity of such Notes, upon the failure to make any payment, partial or otherwise, of the amounts due as principal or interest in compliance with the mandatory terms set out in this Article. In the event that the failure to pay lasts for sixty days from the expiry of the deadline for the fulfilment, the holders of the senior Notes, with the agreement and also through the representative of the noteholders (RON), shall send to the assignee company a request for the payment of any amount due and unpaid; after thirty days and within six months from the date of receipt of the request letter to the assignee company if payment remains outstanding, the holder of the senior Notes, with the agreement and also through the representative of the noteholders (RON), may request the intervention of the state guarantee.

2. Within thirty days from the receipt of the documented request of the enforcement of the state guarantee, the Ministry of Economy and Finance shall pay the amount to the holders of the senior Note in compliance with the terms and the amount originally set out in the securitisation transaction documents which have not been paid by the originator, without any further interest or costs.

3. By making the relevant payment, the Ministry of Economy and Finance is subrogated to the rights of the holders of the senior Notes and shall, subject to the contractual limitations provided for the exercise of such rights and subordinated to the payment of any amount due as interest to the holders of the senior Notes, recover the amount paid, the interest at the legal rate accrued from the payment date to the redemption date and the costs incurred for the recovery, also by way of the registration procedure in the register, pursuant to the Decree of the President of the Republic No. 602 of 29 September 1973 and the Legislative Decree No. 46 of 26 February 1999, as amended. Such amounts shall be paid to the special account referred to in Article 12.

Art. 12

(Financial funds)

1. For the purposes of this Chapter, a specific fund with a budget of Euro 120 million in respect of the year 2016 has been established within the Ministry of Economics and Finance. This fund is further financed with the annual fees of the granted guarantees which are paid for such purpose on the entry of the State balance sheet for the following reassignment to the Fund. Such amounts are paid on special accounting secured for the payment related to the enforcement (if any) of such guarantees, as well as for the additional costs in connection with the implementation of this Chapter, deriving from 3, paragraph 3 and Article 13, paragraph 1.

2. In relation to the cost referred to in paragraph 1, provision is made for a corresponding reduction of the budget of the fund referred to in Article 37, paragraph 6, of Law Decree No. 66 of 24 April 2014, converted with amendments by Law No. 89 of 23 June 2014.

Art. 13

(Implementing provisions)

1. The Ministry of Economy and Finance may use, pursuant to Article 19, paragraph 5, of Law Decree No. 78 of 1 July 2009, as converted, with amendments, by the law no. 102 of 3 August 2009, as converted with amendments, by the law no. 102 of 3 August 2009, a wholly public owned company for the management of the intervention.

2. The implementing provisions of this Chapter may be adopted within sixty days from the date of entry into force of the conversion law of this decree by a non-regulatory decree of the Minister of Economy and Finance.

Art. 13-bis

(Supervision of asset-backed securities)

1. The words: (<<paragraphs 1, 2, 3, 4, 5 and 7, and 7-ter, paragraph 1>> of Article 7-quarter of the law no. 130 of 30 April 1999, are replaced by the following: (<<paragraphs 1, 2, 3, 4, 5, 6 and 7, and 7-ter, paragraph 1>>.

GACS Decree no. 18/2016

(Decree of the Ministry for the Economy and Finance (Italian Treasury) containing implementing regulations for the State guarantee scheme for non-performing loans (GACS) under Article 13 of the Law Decree no. 18 of 14 February 2016 converted into law with amendments by article 1(1) of law no. 49 of 8 April 2016).

The Italian Treasury

Considering Law 130 of 30 April 1999 concerning "Provisions for loan securitisation";

Considering Title II of Law Decree no. 18 of 14 February 2016 converted into law with amendments by article 1(1) of law no. 49 of 8 April 2016 containing the rules in relation to the guarantee for non performing loan securitisations (GACS);

Considering inter alia article 13(1) of such law decree that specifies that the Italian Treasury Minister may set up a wholly-publicly owned entity for the management of the programme under Article 19(5) of law decree no. 78 of July 1st 2009, converted with amendments by law no. 102 of August 3, 2009;

Considering article 13(2) of the same law decree which provides that implementing provisions relating to Title II of such law decree can be adopted by way of non-regulatory decree of the Italian Treasury within 60 days of the conversion law;

Considering that, pursuant to article 192(2) of the law decree no. 50 of 18 April 2016, the Italian Treasury has appointed CONSAP as in-house entity being the most appropriate entity for such role, having considered its organisational structure, professional attributes, experience in similar processes and also its efficiency, value-for-money, and quality in terms of services provided;

Hereby decrees:

Article 1

(Definitions)

1. In this decree the following definitions apply:

a) "Banks" means banks with registered office in Italy and registered pursuant to article 13 of legislative decree no 385 of September 1 1993;

b) "Law Decree" means law decree no. 18 of February 14 2016, converted with amendments into law by article 1(1) of law no 49 of 8 April 2016;

c) "Manager" means CONSAP S.p.A., being a wholly publicly-owned company used by the Italian Treasury pursuant to article 19(5) of law decree no. 78 of July 1 2009 converted with amendments by law 102 of August 3 2009 for the management of the Fund by way of specific regulation to be signed by way of acceptance by CONSAP S.p.A.;

d) "Financial Intermediaries" means financial intermediaries with registered office in Italy and registered pursuant to article 106 of legislative decree no. 385 of September 1 1993;

e) "Treasury" means the Italian Ministry for the Economy and Finance;

f) "Securitisation Company" means a securitisation company incorporated under law 130 of 30 April 1999, as transferee of receivables and issuer of Senior Notes benefiting from the guarantee, or the issuer of the Senior Notes, where different from the transferee under law 130 of April 30 1999.

g) "Originators" Banks or Financial Intermediaries as sellers of pecuniary receivables including claims arising under leasing contracts classified as non-performing.

h) "Independent Entity" means the independent entity named by the Treasury following approval by the European Commission under article 3(3) of the Law Decree.

Article 2

(Transaction structure)

2. In accordance with the Law Decree, for a securitisation transaction to qualify for the guarantee it shall have the following characteristics:

a) the receivables to be securitised shall be transferred to the Securitisation Company for an aggregate amount does not exceed the aggregate gross book value, net of adjustments and that includes any collections generated by such receivables and belonging to the Securitisation Company and received by the Bank between the accounting reference date and the date of transfer as evidenced by the Originator on the basis of its accounting records;

b) the securitised receivables shall be classified and registered as non-performing (in sofferenza) on a date preceding the transfer to the Securitisation Company.

Article 3

(Senior Notes)

1. Pursuant to Article 4 of the Law Decree, Senior Notes are those of a class that is not subordinated to other classes in such issuance. A class of Notes is considered as non-subordinated to another class of the same issuance if, in compliance with the post-enforcement priority of payments and, if applicable, the post-acceleration priority of payments, as set out in the terms and conditions of the notes, no other class shall be given priority over that class in respect of receiving payments of principal or interest.

2. If more than one class of Senior Notes is issued, the State guarantee may be requested in respect of one or more than one tranche of Senior Notes.

Article 4

(Order of priority of payments)

1. Amounts deriving from recoveries and collections in relation to the pool of receivables transferred shall be utilized to pay amounts due to the noteholders and other costs and fees relating to the transaction.

2. Starting from the application of the priority of payments following the occurrence of an event triggering an enforcement (post-enforcement priority) or, where applicable an acceleration (post-acceleration priority) as may be specified in accordance with the terms and conditions of the notes and the transaction documents, no payments senior to the Senior Notes shall be made other than those set out in article 7 of the Law Decree.

Article 5

(Transactions qualifying for the guarantee)

1. The terms and conditions of the notes and the transaction documents shall have the following characteristics in order for the same to qualify for the guarantee:

a) the non-payment of an amount owed by way of interest on the Senior Notes or the calling of the guarantee shall not cause the Securitisation Company to go into default;

b) the following changes shall not be made without express Treasury consent:

(i) any change in the nominal amount or principal amount of the Senior Notes;

(ii) an increase in the interest rate applicable to the Senior Notes or, where paid senior to the Senior Notes, in the interest rate applicable to the Mezzanine Notes;

(iii) any change in the maturity date of the Senior Notes;

(iv) any change in the trigger events that gives rise to the rights of Senior Noteholders to declare the Securitisation Company in default or to apply the post-acceleration or post-enforcement priority of payments;

(v) any change in the terms and conditions of the notes or the transaction documents which implicates a rating downgrade of the Senior Notes;

(vi) any change in the terms and conditions of the notes or the transaction documents which are to be made after the calling of the guarantee under article 11 of the Law Decree;

c) the Manager and the Independent Entity shall receive regular updates, by electronic means, of data relating to the progress of transactions that benefit from the State guarantee.

2. In order to benefit from the guarantee:

(i) the rating agency shall have access to at least the following information:

(ii) expected cashflows, including those deriving from hedging contracts;

(iii) commissions payable to the servicer;

(iv) payment methodology of interest on the notes;

(v) the guarantee premium;

(vi) any other securitisation cost;

(vii) amounts relating to the classes of notes other than the Senior Notes

d) the rating agency shall have access to both quantitative and qualitative information related to the servicer appointed for the recovery of the receivables;

e) the Originator shall ensure that the Independent Entity shall receive all information necessary to verify compliance with the rules governing the grant of the guarantee.

3. For the purposes of article 8(1) of the Law Decree transfer for valuable consideration (a titolo oneroso) shall include transfer made in the context of extraordinary transactions involving the Originator provided the other conditions of article 8(1) are complied with.

Article 6

(Petitioners)

1. All Originators in multi-seller securitisations shall jointly make the request for the guarantee.

Article 7

(Application form and procedure for the guarantee)

1. The Originator shall send its application request for the guarantee to the Treasury and the Manager by way of time- stamped electronic communication (PEC) using the relevant form available on the website of the Treasury and the Manager, together with the following documentation:

a) securitisation prospectus and ISIN of the Senior Notes to be guaranteed;

b) terms and conditions of the notes and the transaction documents;

c) rating letter and reports confirming the rating in accordance with rating agency procedures (e.g. new issue reports, pre-sale report etc.);

d) the amount of the guarantee premium calculated as at a date falling no later than the 15th business day prior to the date of the request;

e) a letter of undertaking signed by the legal representative of the Originator to lodge the documentation evidencing the transfer of the Junior Notes (and any Mezzanine Notes) permitting

the derecognition of the relevant receivables in a timely manner, together with appropriate auditor's certificate;

f) a letter of undertaking signed by the legal representative of the Originator relating to notifying the Manager of any changes to the terms and conditions of the notes or transaction documents.

2. Applications on forms not compliant with paragraph 1 or not signed by the legal representative of the Originator shall not be considered.

3. The Manager shall assess each application's compliance with the State guarantee requirements set out in the Law Decree and this decree within 15 working days and in chronological order of receipt. The result of the assessment shall be notified as soon as practicable to the Treasury in order for it to approve the Treasury's decree for the granting of the State guarantee.

4. The effectiveness of the guarantee is conditional upon the transfer referred to in article 8(1) of the Law Decree. In the event the conditions set out in article 8(1) are not met within 12 months of the date on which the decree granting the State guarantee is approved, the Originator shall no longer require the benefit of the guarantee and the application must be re-submitted.

5. The Manager shall send a copy of the application form and supporting documentation to the Independent Entity for the purposes of article 3(3) of the Law Decree.

Article 8 (Unenforceability of the guarantee)

1. Subject as provided by the law, and subject to the Treasury's rights as against the Bank where the guarantee has been granted on the basis of acts or representations which are untrue, misleading or incomplete, the guarantee shall become unenforceable in the following cases:

a) if a decision of the Securitisation Company or the noteholders to dismiss the servicer results in the Senior Notes being downgraded by the ECAI;

b) if the terms and conditions of the notes or the other transaction documents have been amended not in compliance with the Law Decree and this decree.

2. The unenforceability of the guarantee shall be set out in a decision of Treasury in accordance with law no 241 of 1990, taking into account the report of the Manager.

This decree shall be notified to all relevant supervisory bodies and published in the Official Gazette of the Republic of Italy.

Rome, 20 April 2017

PART C

(Bank of Italy and European Central Bank publications)

BANCA D'ITALIA
EUROSISTEMA

Questioni di Economia e Finanza

(Occasional Papers)

The management of non-performing loans: a survey among the main Italian banks

by Luisa Carpinelli, Giuseppe Cascarino, Silvia Giacomelli and Valerio Vacca

February 2016

Number 311

1. Abstract[7]

In 2015, the Bank of Italy carried out an investigation into the effectiveness of procedures for recovering corporate loans in 25 major banking groups.

The survey was motivated by the sharp increase of NPLs in the Italian banks' balances, which - at the end of the third quarter of 2015 (last available information) - amounted to approximately 340 billion, equal to 18.7% of the total loans. Slightly less than 273 billion of deteriorated loans is against companies and 58% consists of overdue debts.

The ability of intermediaries to balance their budgets within a reasonable time depends heavily on the efficiency of recovery procedures.

Following this survey, in February 2016, the Bank of Italy published the results, the synthesis of which is provided herein below.

The paper published by the Bank of Italy is entitled: "The management of NPLs: an investigation on major Italian banks". The authors are the following employees of the Bank of Italy: Luisa Carpinelli, Giuseppe Cascarino, Silvia Giacomelli and Valerio Vacca.

2. Synthesis

2.1. Introduction

The main results of the investigation can be summarized as follows.

The recovery rate of liquidation within the average for the period 2011-14 was slightly higher than 40%, on the basis of undiscounted amounts and a dispersion of values among the different banking groups. The persistence of the crisis has dramatically reduced the ability to increase business activities on the market, and - from 2011 to 2014 - the recovered percentages have been reduced for all procedures. Recoveries are achieved almost entirely within five years from the opening of the liquidation, irrespective of the length and type of legal proceedings (bankruptcies, compositions with creditors or positions primarily concerned with real estate executions).

Reorganizations take a relatively long period before evolving in recovery or liquidation of the company: four years after their launch, 62% of the reorganizations is still in progress. The transformation into liquidation involves 23% of the loans; the return to a financial stable situation and the acquisition or incorporation of the company by other companies concerns the remaining 15%.

Liquidations and reorganizations can be distinguished by their duration and by the usual amount of credit secured by guarantees: considering the procedures in progress at December 31, 2014, liquidations have been open for approximately 3.5 years, reorganizations for 1.8 year; the average age has probably been lowered by the significant growth of the number of procedures initiated in recent years as a result of the crisis. On average, reorganizations are secured by collateral security for about 50% of the credit, eight

[7] This is an abstract of the publication of the Bank of Italy. The views expressed are those of the authors and do not involve the Bank of Italy. The following experts took part to the study: Giacomo Rodano and Gennaro Sansone.

percentage points more than liquidations: debtors' availability to reach agreements that preserve the company's ongoing activities appears therefore superior with guarantees of significant value.

In 2014, the management of NPLs absorbed 2.8% of operating costs of the banks. NPLs were mainly managed through transfer of receivables to third parties or through internal structures appointed with such activity. Banks organizational structures for management of NPLs are diversified. Some groups have specialized organizational units, which are focused on liquidations' and reorganizations' management; others have more fragmented structures. The banking aggregations that occurred in the years preceding the crisis are at the origin of current arrangements and affect the availability of an integrated information system. This last element appears to have consequences also on the different degree of responsiveness of banks to the questions of the survey, which in some cases was noticeably higher than the average.

The significant impact of NPLs management on banks' costs is also due to the poor efficiency of legal proceedings. Banks identified the overloading of judicial offices and the complexity of procedures as the main obstacles to an effective credit recovery. Reorganizations would be mainly hampered by the difficulty of delivering new funds, experts' costs, and by the difficulties of coordination with non-financial creditors. Important measures have been taken in the summer of 2015 in order to improve the institutional framework for the management of NPLs that address some of these aspects.

2.2. The recourse to different procedures and their features

The sample of banks provided information on 240,000 positions of companies affected by liquidation procedures at the end of 2014, with an exposure of 95 billion of euros (Figure 1), equal to 78% of their overdue debts for corporate loans.

Over 90% of reported loans relates to liquidations that take place in judicial proceedings; the remaining 10% is related to out-of-court agreements. The latter aspect should not be interpreted as representing a reduced use of the out-of-court means compared with the judicial ones. Considering legal proceedings, bankruptcies represent about half of the total value of reported amounts, while the weight of the compositions is far below the one of property executions. The average amount of insolvency procedures (bankruptcies and compositions with creditors) is higher than the individually based liquidation ones (property executions; Figure 2).

Sample banks reported debt reorganizations of 21,000 positions, totalling $ 33.4 billion (Figure 2). During the investigation period, the bankruptcy law provided for three different judicial remedies: restructuring plans, restructuring agreements and compositions with creditors. These instruments differ primarily due to the degree of involvement of the judicial authority that corresponds to a more complex procedure, and due the applicability of the agreements' content to those creditors who do not adhere to them. These three restructuring procedures, despite involving less than a fifth of debiting companies, represent 57% of the volume of loans subject to reorganization; the most commonly used procedure is the reorganization plan.

The average amount of legal proceedings (about 5 million) is much higher than the out-of-court proceedings (about 900 thousands euros). This is likely to reflect the fact that judicial procedures provide stronger legal protection for the involved parties, but entail higher fixed costs and, therefore, are used for significant amount of receivables.

FIGURE 1

Banks NPLs management procedures (1) (*number of positions; millions of euros; percentages*)				
	a) Procedures aimed at liquidation		**b) Procedures aimed at reorganization**	
	Number of positions	Sums (mln/€)	Number of positions	Sums (mln/€)
Total	239.649	94.766	21.106	33.364
whose:				
Out-of-court settlements (2)	56.557	7.960	17.434	14.413
judicial procedures	183.092	86.806	3.672	18.951
Whose (% of judicial proc.)				
- bankruptcies	55,9%	54,1%	–	–
- compositions with creditors (3)	11,8%	24,6%	21,3%	7,6%
- property executions	32,2%	21,3%	–	–
- reorganization agreements	–	–	18,4%	26,4%
- restructuring plans	–	–	60,3%	66,0%

(1) Only some of the participating banks provided information that would allow distributing all procedures between the different categories; accordingly, values for individual procedures are calculated on a sample smaller than the total. – (2) Out-of-court restructuring agreements are agreements between banks and companies aimed at rebalancing the company's financial structure and restoring a regular repayment; they typically consist in the extension of the amortization plan for mortgages and loans. – (3) The compositions with creditors are addressed in the two sections in relation to the liquidation or restructuring purpose. – (4) In the absence of insolvency procedures, the sums relate to the overall position of the debtor and may not coincide with the recoverable credit through the process of execution.

FIGURE 2

Average amount of NPLs per procedure (1) (*Euros*)		
	a) Procedures aimed at liquidation	**b) Procedures aimed at reorganization**
Total	395.435	1.580.764
whose:		
Out-of-court settlements (2)	118.249	913.433
- judicial procedures	397.792	5.168.628
- bankruptcies	450.073	–
- compositions with creditors (3)	964.403	2.043.368
- property executions (4)	308.021	–
- reorganization agreements	–	8.224.091
- restructuring plans	–	6.214.017

(1) The average amounts of positions subject to the individual procedures may not correspond to the frequency of their use. Indeed, only the data of banks that had responded to all the procedures (see Figure 1) were used to calculate usage frequencies. - (2) Out-of-court restructuring agreements are agreements between banks and companies aimed at re-balancing the company's financial structure and restoring a regular repayment; typically, they consist in the extension of the amortization plan for mortgages and loans. – (3) The compositions with creditors are addressed in the two sections in relation to the liquidation or restructuring purpose. – (4) In the absence of insolvency procedures, the sums relate to the overall position of the debtor and may not coincide with the recoverable credit through the execution procedure.

2.3. The age of procedures

Figure 3 shows the distribution by year of the ongoing procedures at the end of 2014. The average age is probably lowered by the strong growth in the number of procedures initiated in recent years as a result of the crisis.

Almost 80% of the funding involved in liquidation is affected by procedures initiated for less than five years; almost 60% for less than three years. It can be estimated that the average age of liquidations in progress, amount weighted, at the end of 2014, was about 3.5 years; the estimated age of bankruptcies is 3.8 years, that of the composition is 2.9 and that of the execution procedures is 3.3.

Restructuring operations have an average age of 1.8 year, half of that of liquidation. Almost 90% of credit volumes are involved in operations started within a period of three years; almost 40% within a year.

FIGURE 3

The age of credit liquidation procedures at the end of 2014 *(percentage values)*				
Total procedures of judicial liquidation whose:				
	Insolvency procedures	*Compositions with creditors*	*Property procedures*	
(a.1) Allocation by number of positions				
< 1 year	13,9	11,4	15,8	15,8
1-3 years	33,9	30,2	38,0	38,0
3-5 years	22,2	24,0	20,4	20,4
5-8 years	16,7	17,1	17,6	17,6
8-10 years	4,9	6,2	3,4	3,4
> 10 years	8,3	11,1	4,7	4,7
(a.1) Allocation by sums				
< 1 year	16,0	13,2	20,7	17,6
1-3 years	40,5	38,3	45,5	40,9
3-5 years	22,5	24,5	18,6	22,1
5-8 years	14,0	14,8	12,0	14,5
8-10 years	2,2	2,8	1,2	1,8
> 10 years	4,6	6,4	2,0	3,1

3. Recovery procedures: critical aspects

The survey reported the views of banks on the factors that negatively affect the functioning of the liquidation procedures and of the restructuring instruments.

3.1. Liquidation procedures and restructuring instruments

With regard to bankruptcies, the most important aspect in determining the protracted timing of the expected recovery is the workload of the judicial offices, with a score of 7.7 on a scale of 1 to 10. The second aspect that has to be considered is the inadequacy of the skills of the involved experts, followed by the complexity

of the procedures. Even with regard to real estate enforcement proceedings, the most relevant factor in terms of duration is the workload of the judicial offices. The third main factor is the prevalence of practices more favourable to the debtor in the management of the procedures. Concerning compositions for liquidation purposes, the most important aspects in determining recovery timing are the complexity of the procedures and the overwork of the judicial offices.

The main obstacles to the use of restructuring instruments indicated by banks are the high cost of the experts involved, the unavailability of interim finance, as well as the difficulties of coordination with non-financial creditors (employees and providers). Less weight is attributed to the problems of coordination between banks and the involvement of the public sector.

4. Conclusions

As a consequence of the considerable length of the procedures, especially for bankruptcies, the information collected on the timing frame for recovery of credits shows that almost all of the recoveries take place within the first five years; there is no clear evidence that extending the procedures over a certain period will increase its effectiveness. These results suggest, on the one hand, the need for interventions that reduce the length of proceedings; on the other hand, the opportunity for regulatory amendments to facilitate their closing once the substantial economic effect has been achieved. This path has already been undertaken with the summer 2015 measures and could be usefully adopted.

With regard to individual recovery instruments, interesting indications emerge from the composition with creditors. Despite the reforms that have taken place since 2005 and that focused to highlight its role of restructuring, this instrument continues to be mainly used for liquidation purposes. It plays a significant role in the liquidation process and the recovery rates obtained by banks with the composition are slightly higher than those obtained with the bankruptcy procedure. The use of instruments chosen by the parties, supervised by the courts for risking default companies' liquidation is, however, envisaged in many jurisdictions. Among restructuring instruments, instead, risking defaults composition is used less often than other options provided by Italian legislation and is less effective.

More generally, the survey reveals that reorganization transactions are rarely effective: in most cases, they are still in place four years after their beginning. This suggests that attempts to preserve the continuity of business experiencing temporary difficulties require a long time, but could also indicate a dilatory use of debt restructuring instruments.

Finally, the survey confirmed the importance of the availability of adequate information with regard to the phenomenon. The quality of bank replies has sometimes been affected by the lack of an integrated information system on NPL's management. This situation seems to be improving, as some groups have recently equipped themselves with information systems that can handle data on different procedures in an integrated way and according to standard criteria. In a long term perspective, the systematic creation of databases and the timely availability of information on NPL's appears to be crucial for their "active" management and to negotiate the relative transfer to third parties.

EUROPEAN CENTRAL BANK

BANKING SUPERVISION

Guidance to banks on non-performing loans

March 2017

BANKENTOEZICHT
BANKTILLSYN BANKU UZRAUDZĪBA
BANKŲ PRIEŽIŪRA NADZÓR BANKOWY
VIGILANZA BANCARIA BANKFELÜGYELET BANKING SUPERVISION
SUPERVISION BANCAIRE BANČNI NADZOR
MAOIRSEACHT AR BHAINCÉIREACHT NADZOR BANAKA
BANKING SUPERVISION
PANGANDUSJÄRELEVALVE SUPERVISÃO BANCÁRIA
BANKOVNÍ DOHLED
БАНКОВ НАДЗОР BANKTILSYN
BANKENAUFSICHT
ΤΡΑΠΕΖΙΚΗ ΕΠΟΠΤΕΙΑ PANKKIVALVONTA
SUPRAVEGHERE BANCARĂ BANKOVÝ DOHĽAD
SUPERVIŻJONI BANKARJA SUPERVISIÓN BANCARIA
BANKING SUPERVISION BANKENAUFSICHT
SUPERVISÃO BANCÁRIA

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1 Introduction

1.1 Context of this guidance

A number of banks in Member States across the Euro area are currently experiencing high levels of non-performing loans (NPLs), as shown in Figure 1.

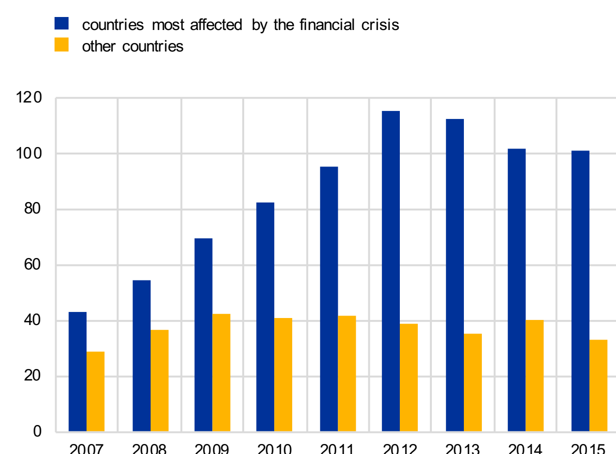
There is broad consensus on the view that high NPL levels ultimately have a negative impact on bank lending to the economy[1], as a result of the balance sheet, profitability, and capital constraints faced by banks with high NPL levels.

Figure 1

Texas ratio and Impaired loan ratio evolution in the euro area

Ratio of non-performing loans to tangible equity and loan loss reserves for euro area significant banking groups

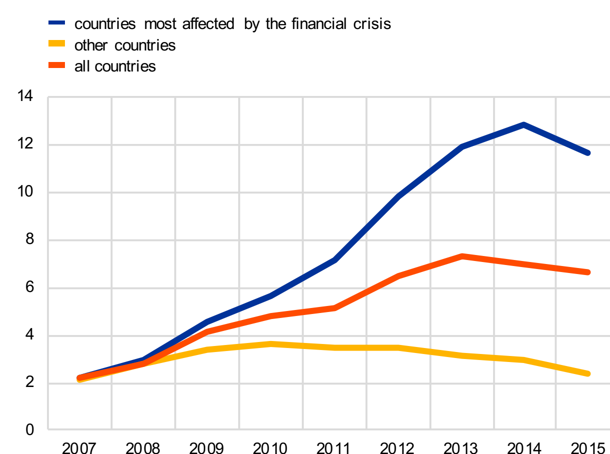
(2007-2015; percentages; median values)



Source: SNL Financial.
Notes: Based on publicly available data for a sample of significant banking groups. Countries most affected by the financial crisis are Cyprus, Greece, Ireland, Italy, Portugal, Slovenia and Spain.

Impaired loan ratios for euro area significant banking groups

(2007-2015; percentage of loans, median values)



Source: SNL Financial.
Notes: Based on publicly available data for a sample of 55 significant banking groups. Countries most affected by the crisis include Cyprus, Greece, Ireland, Italy, Portugal, Slovenia and Spain.

The deliberate and sustainable reduction of NPLs in banks' balance sheets is beneficial to the economy from both a microprudential and a macroprudential perspective. At the same time, it is acknowledged that economic recovery is also an important enabler of NPL resolution.

Addressing asset quality issues is one of the key priorities for European Central Bank (ECB) banking supervision. The ECB's focus on this issue began with the 2014 comprehensive assessment, which comprised two main pillars – an asset quality review and a stress test. Subsequent to the comprehensive assessment, ECB banking supervision continued to intensify its supervisory work on NPLs. In the context of on-going supervisory engagement, the joint supervisory teams (JSTs)

[1] See ECB and other international research, e.g. International Monetary Fund (IMF) discussion note "Strategy for Resolving Europe's Problem Loans"

have observed varying approaches by banks to the identification, measurement, management and write-off of NPLs. In this regard, in July 2015 a high-level group on non-performing loans (comprising staff from the ECB and national competent authorities) was mandated by the Supervisory Board of the ECB to develop a consistent supervisory approach to NPLs.

Furthermore, in its supervisory priorities, ECB banking supervision has highlighted credit risk and heightened levels of non-performing loans as key risks facing euro area banks.

Through the work of the high-level group, ECB banking supervision has identified a number of best practices that it deems useful to set out in this public guidance document. These practices are intended to constitute ECB banking supervision's supervisory expectation from now on.

This guidance contains predominantly qualitative elements. The intention is to extend the scope of the guidance based on the continuous monitoring of developments concerning NPLs. As a next step in this regard, the ECB plans to place a stronger focus on enhancing the timeliness of provisions and write-offs.

While it is acknowledged that addressing non-performing loans will take some time and will require a medium-term focus, the principles identified will also serve as a basic framework for conducting the supervisory evaluation of banks in this specific area. As part of their ongoing supervisory work, the JSTs will engage with banks regarding the implementation of this guidance. It is expected that banks will apply the guidance proportionately and with appropriate urgency, in line with the scale and severity of the NPL challenges they face.

1.2 Applicability of this guidance

This guidance is addressed to credit institutions within the meaning of Article 4(1) of Regulation (EU) 575/2013 (CRR)[2], hereinafter named “banks”. It is generally applicable to all significant institutions (SIs) supervised directly under the Single Supervisory Mechanism (SSM), including their international subsidiaries. However, the principles of proportionality and materiality apply. Hence, parts of this document, namely chapters 2 and 3 on NPL strategy, governance and operations, may be more relevant for banks with high levels of NPLs (“high NPL banks”) that need to deal with this extraordinary situation. Nonetheless, SIs with a relatively low overall level of NPLs might still find it useful to apply certain parts of those chapters, e.g. to high NPL portfolios. Chapters 4, 5, 6 and 7 are considered applicable to all SIs.

For the purpose of this guidance, the ECB’s banking supervision defines high NPL banks as banks with an NPL level that is considerably higher than the EU average

[2] Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1).

level.[3] However, this definition is highly simplified and banks not falling under its terms might still benefit from applying the full content at their own initiative or on request by supervisors, especially in the case of significant NPL inflows, high levels of forbearance or foreclosed assets, low provision coverage or an elevated Texas ratio[4].

This NPL guidance is currently non-binding in nature. However, banks should explain and substantiate any deviations upon supervisory request. This guidance is taken into consideration in the SSM regular Supervisory Review and Evaluation Process and non-compliance may trigger supervisory measures.

This guidance does not intend to substitute or supersede any applicable regulatory or accounting requirement or guidance from existing EU regulations or directives and their national transpositions or equivalent, or guidelines issued by the European Banking Authority (EBA). Instead, the guidance is a supervisory tool with the aim of clarifying the supervisory expectations regarding NPL identification, management, measurement and write-offs in areas where existing regulations, directives or guidelines are silent or lack specificity. Where binding laws, accounting rules and national regulations on the same topic exist, banks should comply with those. It is also expected that banks do not enlarge already existing deviations between regulatory and accounting views in the light of this guidance, but rather the opposite: whenever possible, banks should foster a timely convergence of regulatory and accounting views where those differ substantially.

This guidance should be applicable as of its date of publication. SIs may, however, close identified gaps thereafter based on suitable time-bound action plans which should be agreed with their respective JSTs. In order to ensure consistency and comparability, the expected enhanced disclosures on NPLs should start from 2018 reference dates.

1.3 Scope of this guidance

“NPLs” is generally used in this guidance as a shorthand term. However, in technical terms, the guidance addresses all non-performing exposures (NPEs), following the EBA definition[5], as well as foreclosed assets, and also touches on performing exposures with an elevated risk of turning non-performing, such as “watch-list” exposures and performing forborne exposures. “NPL” and “NPE”’ are used interchangeably within this guidance.

3 A suitable reference to determine EU average NPL ratios and coverage levels is the quarterly published European Banking Authority (EBA) risk dashboard.

4 Definitions of different concepts used in this Guidance can be found in the Glossary in Annex 1.

5 See chapter 5 for details.

1.4 Structure

The document structure follows the life cycle of NPL management. It starts with the supervisory expectations on NPL strategies in chapter 2, which closely link to NPL governance and operations, covered in chapter 3. Following this, the guidance outlines important aspects for forbearance treatments, in chapter 4, and NPL recognition, in chapter 5. Qualitative guidance on NPL provisioning and write-off is treated in chapter 6 while collateral valuations are addressed in chapter 7.

2 NPL strategy

2.1 Purpose and overview

An NPL strategy establishes strategic objectives for high NPL banks for the time-bound reduction of NPLs over realistic but sufficiently ambitious time-bound horizons (NPL reduction targets). It should lay out the bank's approach and objectives regarding the effective management (i.e. maximisation of recoveries) and ultimate reduction of NPL stocks in a clear, credible and feasible manner for each relevant portfolio.

The following steps are considered to be the core building blocks related to the development and implementation of an NPL strategy:

1. assessing the operating environment, including internal NPL capabilities, external conditions impacting NPL workout and capital implications (see section 2.2);
2. developing the NPL strategy, including targets in terms of development of operational capabilities (qualitative) and projected NPL reductions (quantitative) over the short, medium and long-term time horizons (see section 2.3);
3. implementing the operational plan, including any necessary changes in the organisational structure of the bank (see section 2.4);
4. fully embedding NPL strategy into the management processes of the bank, also including a regular review and independent monitoring (see section 2.5).

Governance aspects relating to the NPL strategy are mostly covered in chapter 3.

2.2 Assessing the operating environment

Understanding the full context of the operating environment, both internally and externally, is fundamental to developing an ambitious yet realistic NPL strategy.

The first phase in the formulation and execution of a fit-for-purpose NPL strategy is for the bank to complete an assessment of the following elements:

1. the internal capabilities to effectively manage, i.e. maximise recoveries, and reduce NPLs over a defined time horizon;
2. the external conditions and operating environment;
3. the capital implications of the NPL strategy.

2.2.1 Internal capabilities/self-assessment

There are a number of key internal aspects that influence the bank's need and ability to optimise its management of, and thus reduce, NPLs and foreclosed assets (where relevant). A thorough and realistic self-assessment should be performed to determine the severity of the situation and the steps that need to be taken internally to address it.

The bank should fully understand and examine:

- Scale and drivers of the NPL issue:
  - the size and evolution of its NPL portfolios on an appropriate level of granularity, which requires appropriate portfolio segmentation as outlined in chapter 3;
  - the drivers of NPL in-flows and out-flows, by portfolio where relevant;
  - other potential correlations and causations.
- Outcomes of NPL actions taken in the past:
  - types and nature of actions implemented, including forbearance measures;
  - the success of the implementation of those activities and related drivers, including the effectiveness of forbearance treatments.
- Operational capacities (processes, tools, data quality, IT/automation, staff/expertise, decision making, internal policies, and any other relevant area for the implementation of the strategy) for the different process steps involved, including but not limited to:
  - early warning and detection/recognition of NPLs;
  - forbearance;
  - provisioning;
  - collateral valuations;
  - recovery/legal process/foreclosure;
  - management of foreclosed assets (if relevant);
  - reporting and monitoring of NPLs and effectiveness of NPL workout solutions.

For each of the process steps involved, including those listed above, banks should perform a thorough self-assessment to determine strengths, significant gaps and any areas of improvement required for them to reach their NPL reduction targets. The resulting internal report should be shared with the management body and supervisory teams.

Banks should repeat or update relevant aspects of the self-assessment at least annually and also regularly seek independent expert views on these aspects if necessary.

2.2.2 External conditions and operational environment

Understanding the current and possible future external operating conditions/environment is fundamental to the establishment of an NPL strategy and associated NPL reduction targets. Related developments should be closely followed by banks, which should update their NPL strategies as needed. The following list of external factors should be taken into account by banks when setting their strategy. It should not be seen as exhaustive as other factors not listed below might play an important role in specific countries or circumstances.

Macroeconomic conditions

Macroeconomic conditions will play a key role in setting the NPL strategy and are best incorporated in a dynamic manner. This also includes the dynamics of the real estate market[6] and its specific relevant sub-segments. For banks with specific sector concentrations in their NPL portfolios (e.g. shipping or agriculture), a thorough and constant analysis of the sector dynamics should be performed, to inform the NPL strategy.

A reduction of the risk stemming from NPLs can be achieved and should be the aim, even in less favourable macroeconomic conditions.[7]

Market expectations

Assessing the expectations of external stakeholders (including but not limited to rating agencies, market analysts, research, and clients) with regard to acceptable NPL levels and coverage will help to determine how far and how fast high NPL banks should reduce their portfolios. These stakeholders will often use national or international benchmarks and peer analysis.

NPL investor demand

Trends and dynamics of the domestic and international NPL market for portfolio sales will help banks make informed strategic decisions regarding projections on the likelihood and possible pricing of portfolio sales. However, investors ultimately price

[6] Unless exposures secured by real estate collateral are not relevant within the NPL portfolios.

[7] An example of the target framework applied by Greek significant institutions is provided later in this chapter.

on a case-by-case basis and one of the determinants of pricing is the quality of documentation and exposure data that banks can provide on their NPL portfolios.

NPL servicing

Another factor that might influence the NPL strategy is the maturity of the NPL servicing industry. Specialised servicers can significantly reduce NPL maintenance and workout costs. However, such servicing agreements need to be well steered and well managed by the bank.

Regulatory, legal and judicial framework

National as well as European and international regulatory, legal and judicial frameworks influence the banks' NPL strategy and their ability to reduce NPLs. For example, legal or judicial impediments to collateral enforcement influence a bank's ability to commence legal proceedings against borrowers or to receive assets in payment of debt and will also affect collateral execution costs in loan loss provisioning estimations. Therefore, banks should have a good understanding of the particularities of legal proceedings linked to the NPL workout for different classes of assets and also in the different jurisdictions in which they operate where high levels of NPLs are present. In particular, they should assess: the average length of such proceedings, the average financial outcomes, the rank of different types of exposures and related implications for the outcome (for instance regarding secured and unsecured exposures), the influence of the types and ranks of collateral and guarantees on the outcomes (for instance related to second or third liens and personal guarantees), the impact of consumer protection issues on legal decisions (especially for retail mortgage exposures), and the average total costs associated with legal proceedings. Furthermore, the consumer protection legal environment should also be borne in mind as it also plays a role in client communication and interaction.

Tax implications

National tax implications of provisioning and NPL write-offs will also influence NPL Strategies.

2.2.3 Capital implications of the NPL strategy

Capital levels and their projected trends are important inputs to determining the scope of NPL reduction actions available to banks. Banks should be able to dynamically model the capital implications of the different elements to their NPL strategy, ideally under different economic scenarios. Those implications should also

be considered in conjunction with the risk appetite framework (RAF) as well as the internal capital adequacy assessment process (ICAAP).

Where capital buffers are slim and profitability low, high NPL banks should include suitable actions in their capital planning which will enable a sustainable clean-up of NPLs from the balance sheet.

2.3 Developing the NPL strategy

An NPL strategy should encompass, at a minimum, time-bound quantitative NPL targets supported by a corresponding comprehensive operational plan. It should be based on a self-assessment and an analysis of NPL strategy implementation options. The NPL strategy, including the operational plan, should be approved by the management body and reviewed at least annually.

2.3.1 Strategy implementation options

On the basis of the above-described assessment, banks should review the range of NPL strategy implementation options available and their respective financial impact. Examples of implementation options, not being mutually exclusive, are:

- Hold/forbearance strategy: A hold strategy option is strongly linked to operating model, forbearance and borrower assessment expertise, operational NPL management capabilities, outsourcing of servicing and write-off policies.
- Active portfolio reductions: These can be achieved either through sales and/or writing off provisioned NPL exposures that are deemed unrecoverable. This option is strongly linked to provision adequacy, collateral valuations, quality exposure data and NPL investor demand.
- Change of exposure type: This includes foreclosure, debt to equity swapping, debt to asset swapping, or collateral substitution.
- Legal options: This includes insolvency proceedings or out-of-court solutions.

Banks should ensure that their NPL strategy includes not just a single strategic option but rather combinations of strategies/options to best achieve their objectives over the short, medium and long term and explore which options are advantageous for different portfolios or segments (see section 3.3.2 regarding portfolio segmentation) and under different conditions.

Banks should also identify medium and long-term strategy options for NPL reductions which might not be achievable immediately, e.g. a lack of immediate NPL investor demand might change in the medium to long term. Operational plans might need to foresee such changes, e.g. the need for enhancing the quality of NPL exposure data in order to be ready for future investor transactions.

Where banks assess that the above-listed implementation options do not provide an efficient NPL reduction in the medium to long-term horizon for certain portfolios, segments or individual exposures, this should be clearly reflected in an appropriate and timely provisioning approach. The bank should write off loans which are deemed to be uncollectable in a timely manner.

Finally, it is acknowledged that NPL risk transfer and securitisation transactions can be beneficial for banks in terms of funding, liquidity management, specialisation and efficiency. However, these are usually complex processes and should be conducted with care. Consequently, institutions wanting to engage in such transactions are expected to conduct robust risk analysis and to have adequate risk control processes[8] (see Annex 8 for more details).

2.3.2 Targets

Before commencing the short to medium-term target-setting process, banks should establish a clear view of what reasonable long-term NPL levels are, both on an overall basis but also on a portfolio-level basis. It is acknowledged that there is a considerable amount of uncertainty around the timeframes required to achieve these long-term goals, but they are an important input to setting adequate short and medium-term targets. Banks working in tense macroeconomic conditions should also explore international or historic benchmarks in order to define “reasonable” long-term NPL levels.[9]

High NPL banks should include, at a minimum, clearly defined quantitative targets in their NPL strategy (where relevant including foreclosed assets), which should be approved by the management body. The combination of these targets should lead to a concrete reduction, gross and net (of provisions), of NPL exposures, at least in the medium term. While expectations about changes in macroeconomic conditions can play a role in determining target levels (if based on solid external forecasts), they should not be the sole driver for the established NPL reduction targets.

Targets should be established at least along the following dimensions:

- by time horizons, i.e. short-term (indicative 1 year), medium-term (indicative 3 years) and possibly long-term;
- by main portfolios (e.g. retail mortgage, retail consumer, retail small businesses and professionals, SME corporate, large corporate, commercial real estate);
- by implementation option chosen to drive the projected reduction, e.g. cash recoveries from hold strategy, collateral repossessions, recoveries from legal proceedings, revenues from sale of NPLs or write-offs.

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[8] As required for securitisations under Article 82(1) CRD.

[9] For short to medium-term targets international benchmarks are less relevant.

For high NPL banks, the NPL targets should at a minimum include a projected absolute or percentage NPL exposure reduction, both gross and net of provisions, not only on an overall basis but also for the main NPL portfolios. Where foreclosed assets are material[10], a dedicated foreclosed assets strategy should be defined or, at least, foreclosed assets reduction targets should be included in the NPL strategy. It is acknowledged that a reduction in NPEs might involve an increase in foreclosed assets for the short term, pending the sale of these assets. However, this timeframe should be clearly limited as the aim of foreclosures is a timely sale of the assets concerned. The supervisory expectation for the valuation and approach to foreclosed assets is included in section 7.5. This should be reflected in the NPL strategy.

The targets described should be aligned with more granular operational targets. Any of the monitoring indicators discussed in detail in section 3.5.3 can be implemented as an additional target if deemed appropriate, e.g. related to NPL flows, coverage, cash recoveries, the quality of forbearance measures (e.g. redefault rates), the status of legal actions or the identification of non-viable (denounced) exposures. It should be ensured that such additional NPL targets have an appropriate focus on high risk exposures, e.g. legal cases or late arrears.

Example 1 shows high-level quantitative targets which have been implemented by Greek significant institutions in 2016. Targets were initially defined for all main portfolios on a quarterly basis for the first year. Each of these high-level targets was also accompanied by a standard set of more granular monitoring items, e.g. NPE ratio and coverage ratio for Target 1 or a breakdown of sources of collections for Target 3.

Example 1

Example of high-level NPL targets implemented by Greek SIs in 2016

Result-oriented operational targets	
1	NPE Volume (Gross)
2	NPL Volume (Gross)
3	Cash recoveries (collections, liquidations and sales) from NPEs / Total average NPEs
Sustainable solutions-oriented operational target	
4	Loans with long term modifications / NPE plus Performing forborne exposures with Long Term Modifications
Action-oriented operational targets	
5	NPE >720 dpd not denounced / (NPE >720 dpd not denounced + denounced)
6	Denounced loans for which legal action has been initiated / Total denounced loans
7	Active NPE SMEs[11] for which a viability analysis has been conducted in the last 12 months / Active NPE SMEs
8	SME and Corporate NPE common borrowers[12] for which a common restructuring solution has been implemented
9	Corporate NPE for which the bank(s) have engaged a specialist for the implementation of a company restructuring plan

[10] For example if the ratio of foreclosed assets over total loans plus foreclosed assets is significantly above the average for EU banks having the option to foreclose assets.

[11] A company/ business is considered as “active” when it is not “idle”. The term “idle business” is based on Greek law and refers to businesses with no activity during the reference period.

[12] “Common” refers to debtors that have exposures with more than one bank.

Banks running the NPL strategy process for the first time will likely have a stronger focus on qualitative targets for the short-term horizon. The aim here is to address the deficiencies identified during the self-assessment process and thus establish an effective and timely NPL management framework which allows the successful implementation of the quantitative NPL targets approved for the medium to long-term horizon.

2.3.3 Operational plan

The NPL strategy of a high NPL bank should be supported by an operational plan which is also approved by the management body. The operational plan should clearly define how the bank will operationally implement its NPL strategy over a time horizon of at least 1 to 3 years (depending on the type of operational measures required).

The NPL operational plan should contain at a minimum:

- clear time-bound objectives and goals;
- activities to be delivered on a segmented portfolio basis;
- governance arrangements including responsibilities and reporting mechanisms for defined activities and outcomes;
- quality standards to ensure successful outcomes;
- staffing and resource requirements;
- required technical infrastructure enhancement plan;
- granular and consolidated budget requirements for the implementation of the NPL strategy;
- interaction and communication plan with internal and external stakeholders (e.g. for sales, servicing, efficiency initiatives etc.).

The operational plan should put a specific focus on internal factors that could present impediments to a successful delivery of the NPL strategy.

2.4 Implementing the operational plan

The implementation of the NPL operational plans should rely on suitable policies and procedures, clear ownership and suitable governance structures (including escalation procedures).

Any deviations from the plan should be highlighted and reported to the management body in a timely manner with appropriate remediation actions to be put in place.

Some high NPL banks might need to incorporate wide-ranging change management measures in order to integrate the NPL workout framework as a key element in the corporate culture.

2.5 Embedding the NPL strategy

As execution and delivery of the NPL strategy involves and depends on many different areas within the bank, it should be embedded in processes at all levels of an organisation, including strategic, tactical and operational.

Information

High NPL banks should put significant emphasis on communicating to all staff the key components of the NPL strategy in line with the approach taken for the institutions' overall strategy and vision. This is especially important if the implementation of the NPL strategy involves wide-ranging changes to business procedures.

Ownership, incentives, management goals and performance monitoring

All banks should clearly define and document the roles, responsibilities and formal reporting lines for the implementation of the NPL strategy, including the operational plan.

Staff and management involved in NPL workout activities should be provided with clear individual (or team) goals and incentives geared towards reaching the targets agreed in the NPL strategy, including the operational plan. These incentives should be effective and should not be superseded by other, potentially contrary incentives. Related remuneration policies and performance monitoring frameworks should take the NPL targets sufficiently into account.

Business plan and budget

All relevant components of the NPL strategy should be fully aligned with and integrated into the business plan and budget. This includes, for example, the costs associated with the implementation of the operational plan (e.g. resources, IT, etc.) but also potential losses stemming from NPL workout activities. Some banks might find it useful to establish dedicated NPL loss budgets for the latter to facilitate internal business control and planning.

Risk control framework and culture

The NPL strategy should be fully embedded in the risk control framework. In that context, special attention should be paid to:

- ICAAP[13]: All relevant components of the NPL strategy should be fully aligned with and integrated into the ICAAP. High NPL banks are expected to prepare the quantitative and qualitative assessment of NPL developments under base and stressed conditions including the impact on capital planning;
- RAF[14]: RAF and NPL strategy are closely interlinked. In this regard, there should be clearly defined RAF metrics and limits approved by the management body which are in alignment with the core elements and targets forming part of the NPL strategy;
- Recovery plan[15]: Where NPL-related indicator levels and actions form part of the recovery plan, banks should ensure they are in alignment with the NPL strategy targets and operational plan.

A strong level of monitoring and oversight by risk control functions in respect of the formulation and implementation of the NPL strategy (including operational plan) should also be ensured.

2.6 Supervisory reporting

High NPL banks should report their NPL strategy, including the operational plan, to their Joint Supervisory Teams (JSTs) in the first quarter of each calendar year. To facilitate comparison, banks should also submit the standard template, as included in Annex 7 of this guidance, summarising the quantitative targets and the level of progress made in the past 12 months against plan. This standard template should be submitted on an annual basis. The management body should approve these documents prior to submission to supervisory authorities.

For a smooth process, banks should consult with JSTs at an early stage in the NPL strategy development process.

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[13] As defined in Article 108 of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013, on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (OJ L 176, 27.6.2013, p. 338), known as the CRD; see also Glossary.

[14] As described in the Financial Stability Board's "Principles for An Effective Risk Appetite Framework"; see also Glossary.

[15] As required by Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council (OJ L 173, 12.6.2014, p. 190), known as the Bank Recovery and Resolution Directive (BRRD) (Directive 2014/59/EU); also see Glossary.

3 NPL governance and operations

3.1 Purpose and overview

Without an appropriate governance structure and operational set-up, banks will not be able to address their NPL issues in an efficient and sustainable way.

This chapter sets out key elements to the governance and operations of an NPL workout framework starting with key aspects related to steering and decision making (section 3.2). Following this, it provides guidance with regard to the NPL operating model (section 3.3), internal control framework and NPL monitoring (sections 3.4 and 3.5) and early warning processes (section 3.6).

3.2 Steering and decision making

In accordance with international and national regulatory guidance, a bank's management body should approve and monitor the institution's strategy.[16] For high NPL banks, the NPL strategy and operational plan forms a vital part of the overarching strategy and should therefore be approved and steered by the management body. In particular, the management body should:

- approve annually and regularly review the NPL strategy including the operational plan;
- oversee the implementation of the NPL strategy;
- define management objectives (including a sufficient number of quantitative ones) and incentives for NPL workout activities;
- periodically (at least quarterly) monitor progress made in comparison with the targets and milestones defined in the NPL strategy, including the operational plan;
- define adequate approval processes for NPL workout decisions; for certain large NPL exposures this should involve management body approval;
- approve NPL-related policies and ensure that they are completely understood by the staff;
- ensure sufficient internal controls over NPL management processes (with a special focus on activities linked to NPL classifications, provisioning, collateral valuations and sustainability of forbearance solutions);

[16] Also see "SSM supervisory statement on governance and risk appetite" of June 2016

- have sufficient expertise with regard to the management of NPLs.[17]

The management body and other relevant managers are expected to dedicate an amount of their capacity to NPL workout-related matters that is proportionate to the NPL risks within the bank.

Especially as NPL workout volumes pick up, the bank needs to establish and document clearly defined, efficient and consistent decision-making procedures. In this context, an adequate second line of defence involvement should be ensured at all times.

3.3 NPL operating model

3.3.1 NPL workout units

Separate and dedicated units

International experience indicates that a suitable NPL operating model is based on dedicated NPL workout units (WUs) which are separate from units responsible for loan origination. Key rationales for this separation are the elimination of potential conflicts of interest and the use of dedicated NPL expertise from staff through to management level.

High NPL banks should therefore implement separate and dedicated NPL WUs, ideally starting from the moment of early arrears[18] but latest by the NPL classification of an exposure. This separation of duties approach should encompass not only client relationship activities (e.g. negotiation of forbearance solutions with clients), but also the decision-making process. In this context, banks should consider implementing dedicated decision-making bodies related to NPL workout (e.g. NPL committee). Where overlaps with the bodies, managers or experts involved in the loan origination process are not avoidable, the institutional framework should ensure that any potential conflicts of interest are sufficiently mitigated.

It is acknowledged that for some business lines or exposures (e.g. those requiring special know-how), the implementation of a fully separate organisational unit may not be possible or may require longer periods to embed. In such cases, internal controls should ensure a sufficient mitigation of potential conflicts of interest (e.g. independent view on assessment of borrowers' creditworthiness).

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[17] In certain countries banks have started to consciously build up dedicated management body expertise on NPLs.

[18] Where early arrears are not managed separately, there should be adequate policies, controls and IT infrastructure in place to mitigate the potential conflicts of interest.

Though NPL WUs should be separated from loan origination units, a regular feedback loop between both functions should be established, e.g. to exchange the information needed for planning NPL inflows or to share lessons learnt from NPL workouts that are relevant for originating new business.

Alignment with NPL life cycle

NPL WUs should be set-up taking into account the full NPL life cycle[19] to ensure that NPL workout activities and borrower engagements are tailored, all applicable workout stages have adequate focus and staff is sufficiently specialised. Relevant phases in the NPL life cycle are:

- **Early arrears (up to 90 days past due (dpd))[20]:** During this phase, the focus is on initial engagement with the borrower for early recoveries and on collecting information required for a detailed assessment of the borrower's circumstances (e.g. financial position, status of loan documentation, status of collateral, level of cooperation, etc.). The information collection will allow appropriate borrower segmentation (see section 3.3.2), which ultimately determines the most suitable workout strategy for the borrower. This phase might also involve short-term forbearance options (see also chapter 4) with the aim of stabilising the financial position of the borrower before establishing a suitable workout strategy. In addition, the bank should seek options to improve its position (for instance by signing new loan documents, perfecting outstanding security, minimising cash leakage, taking additional security if available);
- **Late arrears / Restructuring / forbearance[21]:** This phase is focused on implementing and formalising restructuring/forbearance arrangements with borrowers. These restructuring/forbearance arrangements should be put into place only where the borrower affordability assessment concluded that viable restructuring options indeed exist (see also chapter 4). Post completion of a restructuring/forbearance arrangement the borrower should be constantly monitored for a clearly defined minimum period (recommended to be aligned with the cure period in the EBA definition of NPE, i.e. at least 1 year), given their increased risk, before they can eventually be transferred out of the NPL WUs if no further NPL triggers are observed (see also chapter 5).
- **Liquidation / debt recovery / legal cases / foreclosure:** This phase focuses on borrowers for whom no viable forbearance solutions can be found due to the borrower's financial circumstances or cooperation level. In such cases, banks should initially perform a cost-benefit analysis of the different liquidation options including in-court and out-of-court procedures. Based on this analysis, banks should speedily proceed with the chosen liquidation option. Dedicated legal and

[19] This also encompasses assets not technically classified as NPEs such as early arrears, forborne exposures or foreclosed assets – which play an essential role in the NPL workout process.

[20] Unlikely-to-pay exposures could be part of either early arrears or restructuring units, depending on the complexity.

[21] See footnote 20.

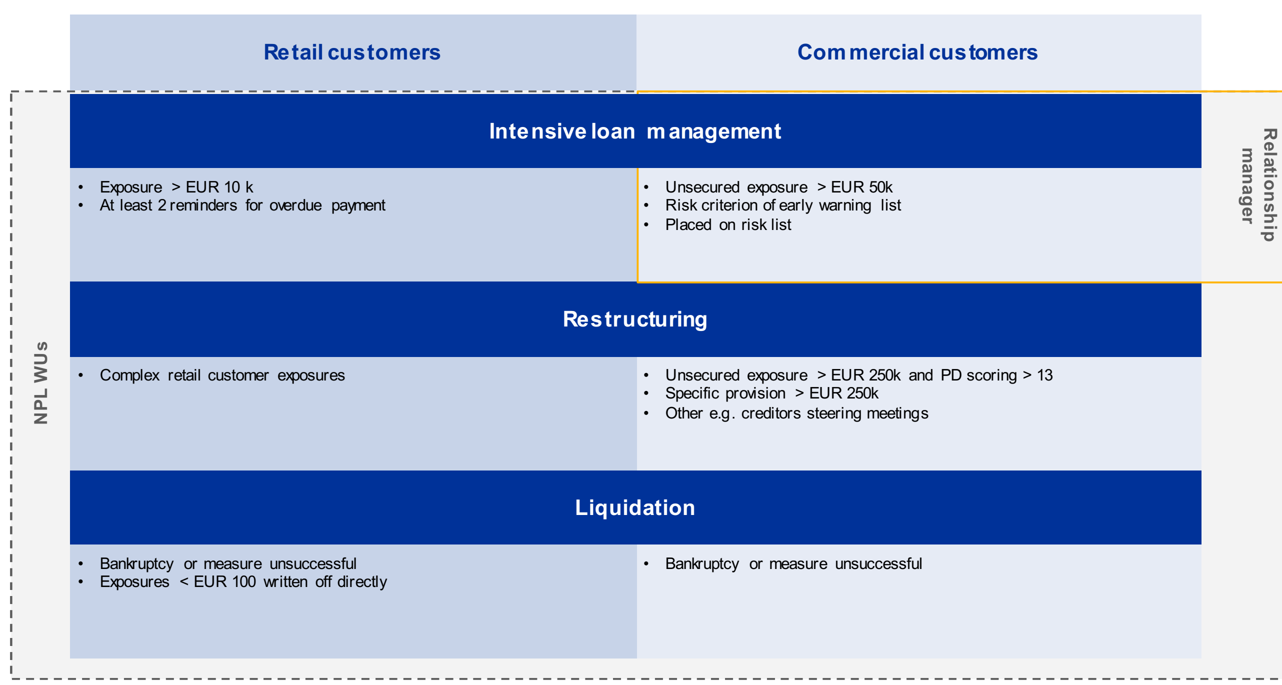
business liquidation expertise is crucial for this phase of the NPL life cycle. Banks that are engaged in extensive use of external experts here should ensure that sufficient internal control mechanisms are in place to ensure an effective and efficient liquidation process. Aged NPL stock should be given special attention in this regard. A dedicated debt recovery policy should contain guidance on the liquidation procedures (see also Annex 5).

- **Management of foreclosed assets (or other assets stemming from NPLs)**

High NPL banks should set up different WUs for the different phases of the NPL life cycle and also for different portfolios if appropriate. It is crucial to implement a clear formal definition of "hand-over" trigger which describes when an exposure is moved from the regular/business as usual relationship manager to the NPL WUs and from the management responsibility of one NPL WU to another. The trigger levels should be clearly defined and only allow the application of management discretion under strictly identified circumstances and conditions.

Example 2

Example of an NPL WU structure and triggers implemented by a mid-sized bank



Within the individual NPL WUs, more specialisation is often useful based on the different NPL workout approaches required per relevant borrower segment (see section 3.3.2). Monitoring and quality assurance processes should be sufficiently tailored to these substructures.

A dedicated arrears management policy should contain guidance on the overall NPL workout procedures and responsibilities, including hand-over triggers (see also Annex 5).

Example 2 shows an example of an NPL WU structure as implemented by a mid-sized significant institution, including the triggers applied to determine the appropriate NPL WU for each borrower. It shows that this bank has assessed it as being more appropriate to keep early arrears in the commercial portfolio with the regular market operations/relationship managers while borrowers of all other NPL exposures are managed by separate and dedicated NPL WUs. Commercial restructurings and complex retail restructurings are dealt with by the same unit.

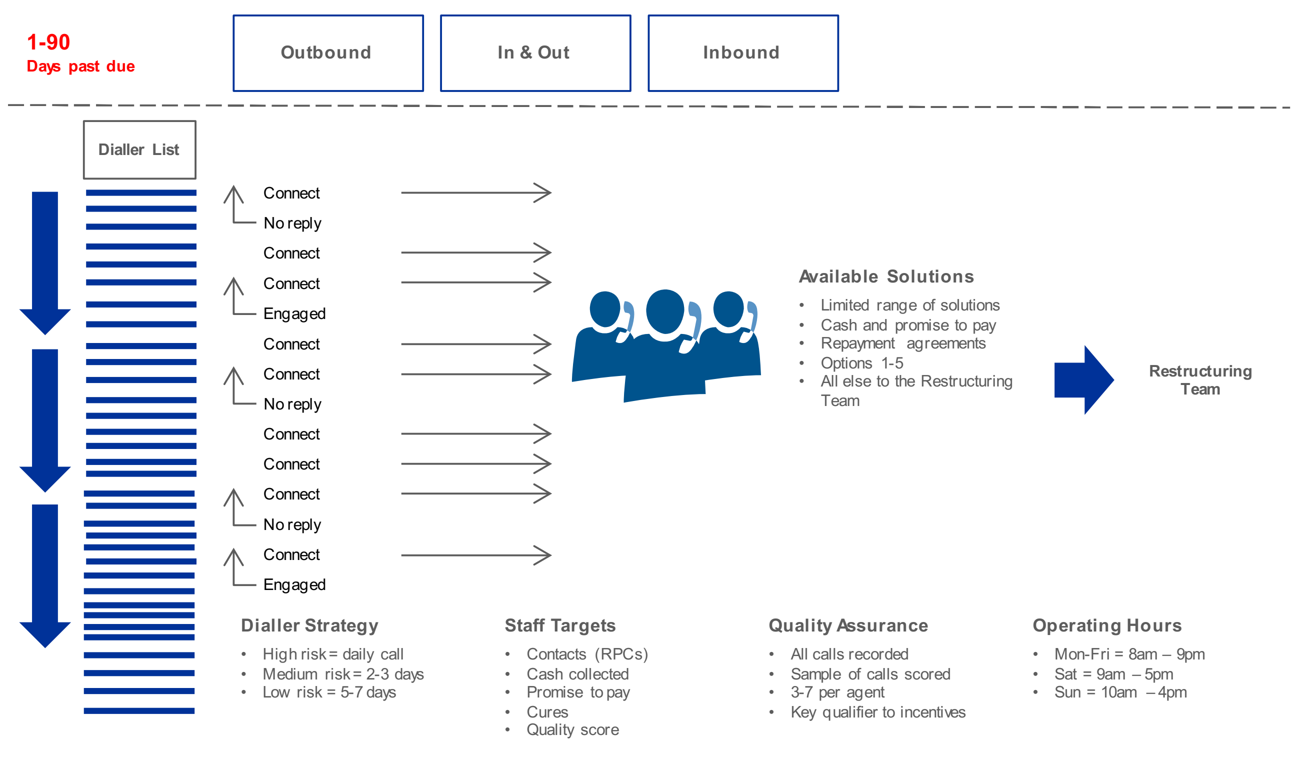
Tailoring to portfolio specificities

When designing an appropriate NPL WU structure, banks should take into account the specificities of their main NPL portfolios as also shown in the example in Example 2.

For material retail NPL portfolios a somewhat industrialised process could be applied, e.g. using a contact centre in the early arrears phase which will be responsible for the maximisation of early arrears collections (see example in Example 3). It is important, though, to ensure that even in industrialised approaches NPL WU staff have access to specialists when required, e.g. for more complex relationships or products.

Example 3

Example of a retail contact centre in the early arrears phase



For corporate NPL portfolios, relationship management rather than industrialised approaches are usually applied, with a strong sectorial specialisation of NPL WU staff. For sole traders and micro-SMEs, a combination of industrialised elements and relationship approaches seems required.

3.3.2 Portfolio segmentation

A suitable operating model is based on analysing the bank's NPL portfolio with a high degree of granularity, resulting in clearly defined borrower segments. A necessary precondition for this analysis (portfolio segmentation) is the development of appropriate management information (MI) systems and a sufficiently high data quality.

Portfolio segmentation enables the bank to group borrowers with similar characteristics requiring similar treatments, e.g. restructuring solutions or liquidation approaches. Customised processes are then designed for each segment with dedicated expert teams taking ownership of the segments.

Having regard to the principle of proportionality and the nature of the bank's portfolio, segmentation can be conducted by taking multiple borrowers' characteristics into consideration. Segmentations should have a useful purpose, meaning that different segments should generally trigger different treatments by the NPL WUs or dedicated teams within those units.

For corporate NPL portfolios, for instance, segmentation by asset class or sector is likely to be a key driver for NPL WU specialisation, i.e. commercial real estate, land and development, shipping, trading businesses, etc. These portfolios should then be further segmented by the proposed NPL resolution strategy and the level of financial difficulties to ensure that the workout activities are sufficiently focused. Borrowers operating in the same sector will tend to have similar types of credit facilities which might allow the institution to develop specific restructuring products for the respective sectorial segments.

A list of potential segmentation criteria for retail NPL portfolios is contained in Annex 2.

3.3.3 Human resources

Proportionality of the NPL organisation

All banks need to have in place an appropriate and proportionate organisation relative to their business model and taking into account their risks, including risks stemming from NPLs. High NPL banks are therefore expected to devote an appropriate and proportionate amount of management attention and resources to the workout of those NPLs and to the internal controls of related processes. It should be

noted that while there might be some room for sharing management and resources with other parts of the value chain (e.g. loan origination), such overlaps should be carefully considered from the points of view of conflicts of interest and sufficient specialisation as discussed above.

Based on the proportionality criteria and the findings of the bank's NPL self-assessment on capabilities, as included in chapter 2, high NPL banks should regularly review the adequacy of their internal and external NPL workout resources and regularly determine their capacity needs. As part of this, certain benchmarks (e.g. workout accounts per full-time equivalent employee) can be set and monitored. Any staffing gaps arising should be addressed in a speedy fashion. Given the extraordinary nature of the NPL workout activities, banks might choose to use fixed term contracts, internal/external outsourcing or joint ventures for NPL workout activities. In the event that external outsourcing is used, banks should have dedicated experts to closely control and monitor the effectiveness and efficiency of the outsourced activities.[22]

Expertise and experience

Banks should build up the relevant expertise required for the defined NPL operating model, including the NPL WUs and control functions. Wherever possible, resources with dedicated NPL expertise and experience should be hired for key NPL workout tasks. When this is not possible banks should put an even higher emphasis on implementing adequate dedicated NPL training and staff development plans to quickly build in-house expertise using available talent.[23]

Where it is not possible or efficient to build in-house expertise and infrastructure, the NPL WUs should have easy access to qualified independent external resources (such as property appraisers, legal advisors, business planners, industry experts) or to those parts of the NPL workout activities which are outsourced to dedicated NPL servicing companies.

Performance management

For NPL WU staff, individual (if adequate) and team performance should be monitored and measured on a regular basis. For this purpose, an appraisal system tailored to the requirements of the NPL WUs should be implemented in alignment

[22] Any outsourcing of NPLs should be made in accordance with the general requirements and Guidelines on the outsourcing of activities by banks of the European Banking Authority (EBA).

[23] NPL-related training and development plans should include the following aspects where appropriate: negotiating skills, dealing with difficult borrowers, guidance on internal NPL policies and procedures, different forbearance approaches, understanding the local legal framework, obtaining personal and financial information from clients, conducting borrower affordability assessments (tailored to different borrower segments) and any other aspect that is relevant to ensure the correct implementation of the NPL strategy and its operational plans. The major difference in the role and skills required between a relationship manager role in an NPL WU and a relationship manager role on a performing portfolio should be reflected in the training framework.

with the overall NPL strategy and operational plan. Further to quantitative elements linked to the bank's NPL targets and milestones (probably with a strong focus on the effectiveness of workout activities), the appraisal system may include qualitative measurements such as level of negotiations competency, technical abilities relating to the analysis of the financial information and data received, structuring of proposals, quality of recommendations, or monitoring of restructured cases.

It should also be ensured that the higher degree of commitment (e.g. outside of regular working hours) usually required of NPL WU staff is sufficiently reflected in the agreed working conditions, remuneration policies, incentives and performance management framework.

The performance measurement framework for high NPL banks' management bodies and relevant managers should include specific indicators linked to the targets defined in the NPL strategy and operational plan. The importance of the respective weight given to these indicators within the overall performance measurement frameworks should be proportionate to the severity of the NPL issues faced by the bank.

Finally, given that the important role of efficient addressing of pre-arrears is a key driver for the reduction of NPL inflows, a strong commitment of relevant staff regarding the addressing of early warnings should also be fostered through the remuneration policy and incentives framework.

3.3.4 Technical resources

One of the key success factors for the successful implementation of any NPL strategy option is an adequate technical infrastructure. In this context, it is important that all NPL-related data is centrally stored in robust and secured IT systems. Data should be complete and up-to-date throughout the NPL workout process.

An adequate technical infrastructure should enable NPL WUs to:

- Easily access all relevant data and documentation including:
  - current NPL and early arrears borrower information including automated notifications in the case of updates;
  - exposure and collateral/guarantee information linked to the borrower or connected clients;
  - monitoring/documentation tools with the IT capabilities to track forbearance performance and effectiveness;
  - status of workout activities and borrower interaction as well as details on forbearance measures agreed etc.;
  - foreclosed assets (where relevant);
  - tracked cash flows of the loan and collateral;

- sources of underlying information and complete underlying documentation;
- access to central credit registers, land registers and other relevant external data sources where technically possible.

- Efficiently process and monitor NPL workout activities including:
  - automated workflows throughout the entire NPL life cycle;
  - automated monitoring process (“tracking system”) for the loan status ensuring a correct flagging of non-performing and forborne exposures;
  - industrialised borrower communication approaches, e.g. through call centres (including integrated card payment system software on all agent desktops) or internet (e.g. file sharing system);
  - incorporated early warning signals (see also section 3.5);
  - automated reporting throughout the NPL workout lifecycle for NPL WU management, the management body and other relevant managers as well as the regulator;
  - performance analysis of workout activities by NPL WU, sub-team and expert (e.g. cure/success rate, rollover information, effectiveness of restructuring options offered, cash collection rate, vintage analysis of cure rates, promises kept rate at call centre, etc.);
  - evolution monitoring of portfolio(s) / sub-portfolio(s) / cohorts / individual borrowers.
- Define, analyse and measure NPLs and related borrowers:
  - recognise NPLs and measure impairments;
  - perform suitable NPL segmentation analysis and store outcomes for each borrower;
  - support the assessment of the borrower’s personal data, financial position and repayment ability (borrower affordability assessment), at least for non-complex borrowers;
  - conduct calculations of (i) the net present value and (ii) the impact on the capital position of the bank for each restructuring option and/or any likely restructuring plan under any relevant legislation (e.g. foreclosures law, insolvency laws) for each borrower.

The adequacy of technical infrastructure, including data quality, should be assessed by an independent function on a regular basis (for instance internal or external audit).

3.4 Control framework

Banks, especially high NPL banks, should implement effective and efficient control processes for the NPL workout framework, in order to ensure full alignment between the NPL strategy and operational plan on the one hand, and the bank's overall business strategy (including NPL strategy and operational plan) and risk appetite on the other hand. Where these controls detect weaknesses, procedures should be in place in order to address them in a timely and effective manner.

The control framework should involve all three lines of defence. The roles of the different functions involved should be assigned and documented clearly to avoid gaps or overlaps. Key outcomes of second and third-line activities as well as defined mitigating actions and progress on those needs should be reported to the management body regularly.

3.4.1 First line of defence controls

The first line of defence comprises control mechanisms within the operational units that actually own and manage the bank's risks in the specific NPL workout context, mainly the NPL WUs (depending on the NPL operating model). Owners of first-line controls are the managers of the operational units.

The key tools of first-line controls are adequate internal policies on the NPL workout framework and a strong embeddedness of those policies in daily processes. Therefore, the policy content should be incorporated into IT procedures, as much as possible down to transaction level. Please see Annex 5 for key elements of NPL framework-related policies that should be implemented at high NPL banks.

3.4.2 Second line of defence controls

Second line of defence functions are established to ensure on a continuous basis that the first line of defence is operating as intended and usually comprises risk control, compliance and other quality assurance functions. To adequately perform their control tasks, second-line functions require a strong degree of independence from functions performing business activities, including the NPL WUs.

The degree of control of the NPL framework by the second line should be proportionate to the risk posed by NPLs and should place a special focus on:

1. monitoring and quantification of NPL-related risks on a granular and aggregate basis, including linkage to internal/regulatory capital adequacy;
2. reviewing the performance of the overall NPL operating model as well as elements of it (e.g. NPL WUs management/staff, outsourcing/servicing arrangements, early warning mechanisms);

3. assuring quality throughout NPL loan processing, monitoring/ reporting (internal and external), forbearance, provisioning, collateral valuation and NPL reporting; in order to fulfil this role, a second-line function should have sufficient power to intervene ex ante on the implementation of individual workout solutions (including forbearance) or provisions;

4. reviewing alignment of NPL-related processes with internal policy and public guidance, most notably related to NPL classifications, provisioning, collateral valuations, forbearance and early warning mechanisms.

Risk control and compliance functions should also provide strong guidance in the process of designing and reviewing NPL-related policies, especially with a view to incorporating best practices to address issues identified in the past. At the very minimum these functions should review the policies before they are approved by the management body.

As indicated, the second-line controls constitute continuous activities. As an example, for the early warning mechanism the following activities should be performed at high NPL banks at a minimum on a quarterly basis:

- review the status of early warning indications and actions taken upon them;
- ensure that actions taken are in line with internal policies with regard to timelines and types of actions;
- review adequacy and accuracy of early warning reporting;
- check whether the early warning indicators (EWIs) are effective, i.e. to what extent have NPLs been detected (or not) at an early stage – feedback should be provided directly to the respective function owning the early warning/watch-list process; progress on methodology improvements should be tracked subsequently (at least semi-annually).

3.4.3 Third line of defence controls

The third line of defence usually comprises the internal audit function. It should be fully independent of functions performing business activities and, for high NPL banks, it should have sufficient NPL workout expertise in order to perform its periodic control activities on the efficiency and effectiveness of the NPL framework (including first and second-line controls).

With regard to the NPL framework, the internal audit function should at least perform regular assessments to verify adherence to internal NPL-related policies (see Annex 5) as well as to this guidance. This should also include random and unannounced inspections and file reviews.

In determining the frequency, scope and scale of the controls to be carried out, a proportionality approach should be taken into account. However, for high NPL banks most of the policy/guidance compliance checks should be completed at least

annually and more frequently if significant irregularities and weaknesses have been identified by recent audits.

Based on the results of its controls, the internal audit function should make recommendations to the management body, bringing possible improvements to their attention.

3.5 Monitoring of NPLs and NPL workout activities

The monitoring systems should be based on NPL targets approved in the NPL strategy and related operational plans which are subsequently cascaded down to the operational targets of the NPL WUs. A related framework of key performance indicators (KPIs) should be developed to allow the management body and other relevant managers to measure progress.

Clear processes should be established to ensure that the outcomes of the monitoring of NPL indicators have an adequate and timely link to related business activities such as pricing of credit risk and provisioning.

NPL-related KPIs can be grouped into several high-level categories, including but not necessarily limited to:

1. high-level NPL metrics;
2. customer engagement and cash collection;
3. forbearance activities;
4. liquidation activities;
5. other (e.g. NPL-related profit and loss (P&L) items, foreclosed assets, early warning indicators, outsourcing activities).

Further explanations of the individual categories are given below. High NPL banks should define adequate indicators comparable with those listed below (see also the summary benchmark in Annex 3), which are monitored on a periodic basis.

3.5.1 High-level NPL metrics

NPL ratio and coverage

Banks should closely monitor the relative and absolute levels of NPLs and early arrears in their books at a sufficient level of portfolio granularity. Absolute and relative levels of foreclosed assets (or other assets stemming from NPL activities), as well as the levels of performing forborne exposures, should also be monitored.

Another key monitoring element is the level of impairment/provisions and collateral/guarantees overall and for different NPL cohorts. These cohorts should be defined using criteria which are relevant for the coverage levels in order to provide the management body and other relevant managers with meaningful information (e.g. by number of years since NPL classification, type of product/loan including secured/unsecured, type of collateral and guarantees, country and region of exposure, time to recovery and the use of the going and gone concern approach). Coverage movements should also be monitored and reductions clearly explained in the monitoring reports. The Texas ratio provides a link between NPL exposures and capital levels and is therefore another useful KPI.

Where possible, indicators related to the NPL ratio/level and coverage should also be appropriately benchmarked against peers in order to provide the management body with a clear picture on competitive positioning and potential high-level shortcomings.

Finally, banks should monitor their loss budget and its comparison with actual. This should be sufficiently granular for the management body and other relevant managers to understand the drivers of significant deviations from the plan.

NPL flows, default rates, migration rates and probabilities of default

Key figures on NPL inflows and outflows should be contained in periodic reporting to the management body, including moves from/to NPLs, NPLs in probation, performing, performing forborne and early arrears (≤90 dpd).

Inflows from a performing status to a non-performing status appear gradually (e.g. from 0 dpd to 30dpd, 30dpd to 60dpd, 60dpd to 90dpd, etc.) but can also appear suddenly (e.g. event driven). A useful monitoring tool for this area is the establishment of migration matrices, which will track the flow of exposures into and out of non-performing classification.

Banks should estimate the migration rates and the quality of the performing book month by month, so that actions can be taken promptly (i.e. prioritise the actions) to inhibit the deterioration of portfolio quality. Migration matrices can be further elaborated by loan type (housing, consumer, real estate), by business unit or by other relevant portfolio segment (see section 3.3.2) to identify whether the driver of the flows is attributed to a specific loan segment.[24]

3.5.2 Customer engagement and cash collection

Once NPL WUs have been established, key operational performance metrics should be implemented to assess the unit or employees' (if adequate) efficiency relative to

[24] Constructing adequate historical time series of migration rates allows the calculation of annual default rates which can feed the risk control department's various models in estimating the probabilities of default used for impairment review and stress testing exercises.

the average performance and/or standard benchmark indicators (if they exist). These key operational measures should include both activity-type measures and efficiency-type measures. The list below is indicative of the type of measures, without being exhaustive:

- scheduled vs. actual borrower engagements;
- percentage of engagements converted to a payment or promise to pay;
- cash collected in absolute terms and cash collected vs. contractual cash obligation split by:
  - cash collected from customer payments;
  - cash collected from other sources (e.g. collateral sale, salary garnishments, bankruptcy proceedings);
- promises to pay secured and promises to pay kept vs. promises to pay due;
- total and long-term forbearance solutions agreed with the borrower (count and volume).

3.5.3 Forbearance activities

One key tool available to banks to resolve or limit the impact of NPLs is forbearance[25], if properly managed. Banks should monitor forbearance activity in two ways: efficiency and effectiveness. Efficiency relates mainly to the volume of credit facilities offered forbearance and the time needed to negotiate with the borrower while effectiveness relates to the degree of success of the forbearance option (i.e. whether the revised/modified contractual obligations of the borrower are met).

In additional, proper monitoring of the quality of the forbearance is needed to ensure that the ultimate outcome of the forbearance measures is the repayment of the amount due and not a delaying of the assessment that the exposure is uncollectable. In this regard, the type of solutions agreed should be monitored and long-term (sustainable structural) solutions[26] should be separated from short-term (temporary) solutions.

It is noted that modification in the terms and conditions of an exposure or refinancing could take place in all phases of the credit life cycle; therefore, banks should ensure that they monitor the forbearance activity of both performing and non-performing exposures.

[25] See section 5.3.1 for definition of forbearance.

[26] See also chapter 4 regarding viable forbearance solutions.

Efficiency of forbearance activity

Depending on the potential targets set by the bank and the portfolio segmentation, key metrics to measure their efficiency could be:

- the volume of concluded evaluations (both in number and value) submitted to the authorised approval body for a defined time period;
- the volume of agreed modified solutions (both in number and value) reached with the borrower for a defined time period;
- the value and number of positions resolved over a defined time period (in absolute values and as a percentage of the initial stock).

It might also be useful to monitor the efficiency of other individual steps within the workout process, e.g. length of decision-taking/approval procedure.

Effectiveness of forbearance activity

The ultimate target of loan modifications is to ensure that the modified contractual obligations of the borrower are met and the solution found is viable (see also chapter 4). In this respect, the type of agreed solutions per portfolio with similar characteristics should be separated and the success rate of each solution should be monitored over time.

Key metrics to monitor the success rate of each restructuring solution include:

- **Forbearance cure rate and re-default rate:** Given the fact that most of the loans will present no evidence of financial difficulties right after the modification, a cure period is needed to determine whether the loan has been effectively cured.[27] The minimum cure period applied to determine cure rates should be 12 months aligned with the minimum cure period defined in the "EBA Implementing Technical Standards (ITS) on supervisory reporting" [28]. Thus, banks should conduct a vintage analysis and monitor the behaviour of forborne credit facilities after 12 months from the date of modification to determine the cure rate. This analysis should be conducted per loan segment (borrower with similar characteristics) and, potentially, the extent of financial difficulties prior to forbearance.
  Cure of arrears on facilities presenting arrears could take place either through forbearance measures of the credit facility (forborne cure) or naturally without modification of the original terms of the credit facility (natural cure). Banks should have a mechanism in place to monitor the rate and the volume of those defaulted credit facilities cured naturally. The re-default rate is another key

[27] Criteria for a cure are provided in section 5.3.3.

[28] Commission Implementing Regulation (EU) No 680/2014 of 16 April 2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council (OJ L 191, 28.6.2014, p. 1).

performance indicator that should be included in internal NPL monitoring reports for the management body and other relevant managers.

- **Type of forbearance measure:** Banks should clearly define which types of forbearance measures are defined as short-term versus long-term solutions. Individual characteristics of forbearance agreements should be flagged and stored in the IT systems and periodic monitoring should provide the management body and other relevant managers with a clear view on what proportion of forbearance solutions agreed are (1) of a short-term versus long-term nature; and (2) have certain characteristics (e.g. payment holidays ≥ 12 months, increase of principal, additional collateral, etc.). (See also chapter 4).
- **Cash collection rate:** Another key metric of forbearance activity is the cash collection from restructured credit facilities. Cash collection could be monitored against the revised contractual cash flows, i.e. the actual to contractual cash-flow ratio, and in absolute terms. These two metrics may provide information to the bank for liquidity planning purposes and the relative success of each forbearance measure.
- **NPL write-off:** In certain cases, as part of a forbearance solution, banks may proceed with a forbearance option that involves NPL write-off, either on a partial or full basis. Any NPL write-off associated with the granting of these types of forbearance should be recorded and monitored against an approved loss budget. In addition, the net present value loss associated with the decision to write off unrecoverable loans should be monitored against the cure rate per loan segment and per restructuring solution offered to help better inform the institutions' forbearance strategy and policies.

Indicators relating to forbearance activities should be reported using a meaningful breakdown which could for instance include the type and length of arrears, the kind of exposure, the probability of recovery, the size of the exposures or the total amount of exposures of the same borrower or connected clients, or the number of forbearance solutions applied in the past.

3.5.4 Liquidation activities

Provided that no sustainable restructuring solution has been reached, the bank is still expected to resolve the non-performing exposure. Resolution may involve initiating legal procedures, foreclosing assets, debt to asset/equity swap, and/or disposal of credit facilities/transfer to an asset management company/securitisation. Consequently, this activity should be monitored by the bank to help inform strategy and policies while also assisting with the allocation of resources.

Legal measures and foreclosure

Banks should monitor the volumes and recovery rates of legal and foreclosure cases. This performance should be measured against set targets, in terms of

number of months/years and loss to the institution. In monitoring the actual loss rate, institutions are expected to build historical time series per loan segment to back up the assumptions used for impairment review purposes and stress test exercises.

For facilities covered with collateral or another type of security, banks should monitor the time period needed to liquidate the collateral, potential forced sale haircuts upon liquidation and developments in certain markets (e.g. property markets) to obtain an outlook regarding the potential recovery rates.

In addition, by monitoring the recovery rates from foreclosure and other legal proceedings, banks will be in a better position to reliably assess whether the decision to foreclose will provide a higher net present value than pursuing a forbearance option. The data regarding the recovery rates from foreclosures should be monitored on an ongoing basis and feed potential amendments to banks' strategies for handling their debt recovery/legal portfolios.

Banks should also monitor the average lengths of legal procedures recently completed and the average recovery amounts (including related recovery costs) from these completed procedures.

Debt to asset/equity swap

Banks should carefully monitor cases where the debt is swapped with an asset or equity of the borrower, at least by using the volume indicators by type of assets, and ensure compliance with any limits set by the relevant national regulations on holdings. The use of this approach as a restructuring measure should be backed by a proper business plan and limited to assets where the institution has sufficient expertise and the market realistically allows the determined value to be extracted from the asset in a short to medium-term horizon. The institution should also make sure that the valuation of the assets is carried out by qualified and experienced appraisers.[29]

3.5.5 Other monitoring items

P&L-related items

Banks should also monitor and make transparent to their management bodies the amount of interest accounted for in the P&L stemming from NPLs. Additionally, a distinction should be made between the interest payments on those NPLs actually received and those not actually received. The evolution of loan loss provisions and the respective drivers should also be monitored.

[29] See also section 7.2.4.

Foreclosed assets

If foreclosure is a part of banks' NPL strategy, they should also monitor the volume, ageing, coverage and flows in their portfolios of foreclosed assets (or other assets stemming from NPLs). This should include sufficient granularity of material types of assets. Furthermore, the performance of the foreclosed assets with respect to the predefined business plan should be monitored in an appropriate way and reported to the management body and other relevant managers on an aggregate level.

Early warning indicators

The management body, relevant committees and other relevant managers should receive periodic reports about the early warning (or "watch-list") status for segments where downward trends are expected as well as the watch-list status at exposure/borrower level for large exposures. The reporting should also include the movement of the portfolio over time, e.g. monthly migration effects between the levels of arrears (0 dpd, >0-30dpd, >30-60dpd, >60-90dpd, >90dpd). Indicators of EWI effectiveness should also be included.

Miscellaneous

Other aspects that might be relevant for NPL reporting would include the efficiency and effectiveness of outsourcing/servicing agreements. Indicators used for this are most likely very similar to those applied to monitor the efficiency and effectiveness of internal NPL WUs, though potentially less granular.

Generally, where NPL-related KPIs differ from a regulatory and an accounting or internal reporting viewpoint, these differences should be clearly reported to the management body and explained.

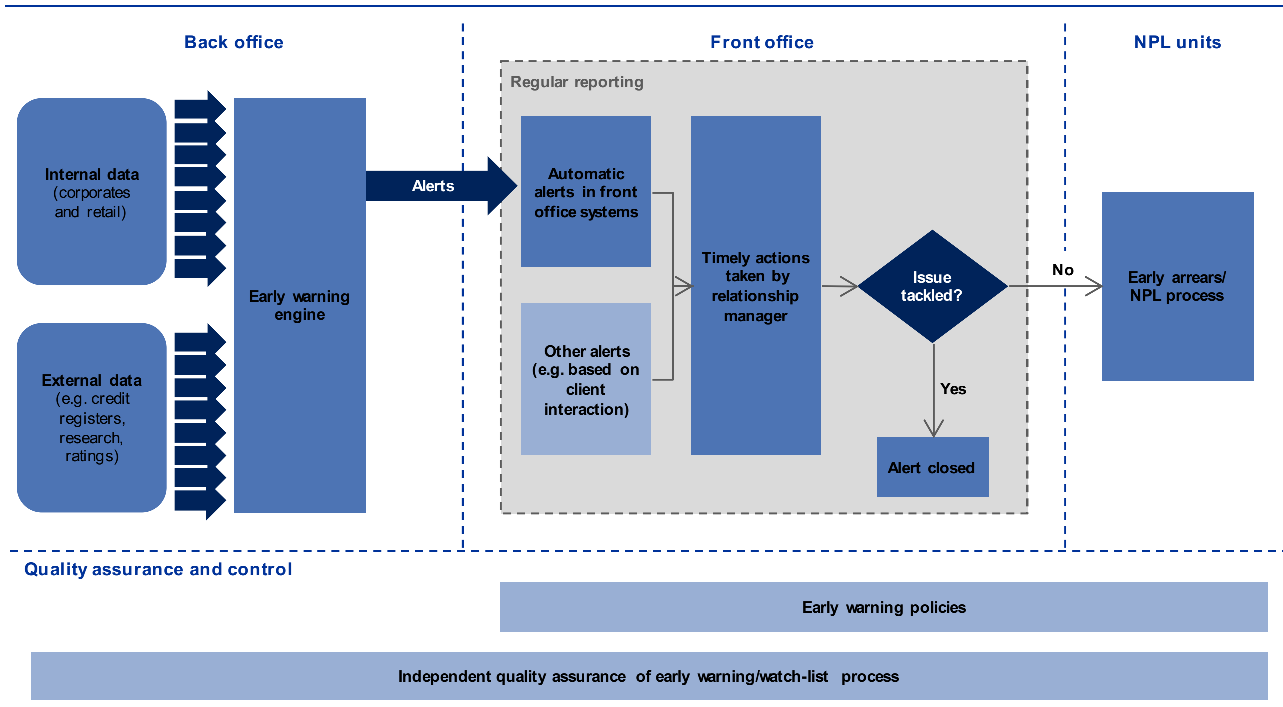
3.6 Early warning mechanisms/watch-lists

3.6.1 Early warning procedure

In order to monitor performing loans and prevent the deterioration of credit quality, all banks should implement adequate internal procedures and reporting to identify and manage potential non-performing clients at a very early stage.

Example 4

Example of early warning approach



The above example shows a generic early warning process including the different steps and parties involved:

- early warning engine owned by the back office;
- early warning alert handling by the front office;
- potential hand-over to NPL units in the case of deteriorating credit quality;
- quality assurance and control via second and third lines of defence.

The following sections detail each of the process steps. It is important to note that each step in the early warning (or watch-list) process should have clear owners. Furthermore, adequate reporting and escalation procedures should be established, and the process should be compatible with the procedures implemented for NPL reporting and the hand-over of borrowers that become non-performing to the NPL WUs.

3.6.2 Early warning engines/indicators

Banks should develop a suitable set of EWIs for each portfolio.

The computation of key EWIs should be carried out at least monthly. For certain specific EWIs (e.g. research at industry/segment/portfolio or borrower level), updates might be available less frequently.

In order to identify early signals of deterioration of performing clients the bank should have a dual perspective: portfolio and transaction/borrower level.

Transaction/borrower level EWIs

At transaction/borrower level, EWIs should be involved in the credit monitoring process to promptly trigger recovery procedures, as well as in the management reporting system as a quality indicator of performing loans.

EWIs should be set on the basis of internal or external input data/information and refer to a point in time or an observation period. Examples of EWIs could be internal score systems (including behavioural) or external data issued by rating agencies, specialised sector research, or macroeconomic indicators for business focused on specific geographical areas.

The early warning engine should analyse the multiple data inputs and establish clear outputs in the form of triggers which then initiate different types of alerts and actions.

Annex 4 includes several examples of EWIs used by different banks as inputs into the EW engine.

Portfolio-level EWIs

In addition to borrower-level EWIs, banks should also determine EWIs at the portfolio level. They should first segment the credit risk portfolio into different classes, e.g. by business lines/client segments, geographical area, products, concentration risks, level of collateralisation and type of collateral provided, or debt-service ability.

For each subcategory the bank should then perform specific sensitivity analyses based on internal and external information (e.g. market overview released by external providers regarding specific sectors or area) in order to identify the portions of the portfolio which could be affected by potential shocks. This analysis should at least enable a sorting of the buckets in terms of riskiness. Policies should provide a set of measures with the level of depth increasing as a function of the expected risk.

Afterwards, banks should identify specific EWIs in relation of each class of risk to detect potential credit deterioration before negative events occurring at transaction level.

On identifying potential trigger events at the level of a portfolio, segment or client group, the banks should undertake a review of the portfolio concerned, define measures and involve both the first and second lines of defence in mitigation actions.

3.6.3 Automated alerts and actions

The front office should be provided with effective tools and operational reporting instruments customised to the relevant portfolio/borrower types, which give them the opportunity to promptly identify the first signals of client deterioration. This should include automated alerts at borrower level with a clear workflow and indications of required actions as well as timelines, all of which should be aligned with the early warning policies. Actions taken should be clearly tracked in the systems, so that quality assurance processes can follow up.

The alerts to the relationship managers and related operational and management reporting should be carried out at least monthly.

In the case of breaches of a set of EWIs or clearly evaluated and defined single indicators (e.g. 30dpd), a clear trigger followed by a defined escalation process should be activated. The involvement of dedicated units to assess the financial situation of the client and discuss potential solutions with the counterparty should be envisaged.

Finally, it should be noted that further to the automated alerts, alerts arising from, for example, interactions with the borrower might play a role in the early warning approach as well – relationship managers should always be alert to borrower information that might impact the borrower's creditworthiness.

3.7 Supervisory reporting

Material and structural changes in the NPL operating model or control framework should be communicated to the respective supervisory teams in a timely fashion. Furthermore, high NPL banks should proactively share periodic NPL monitoring reports, at a suitable level of aggregation, with the supervisor.

4 Forbearance

4.1 Purpose and overview

The key objective of granting forbearance[30] measures is to pave the way for non-performing borrowers to exit their non-performing status, or to prevent performing borrowers from reaching a non-performing status. Forbearance measures should always aim to return the exposure to a situation of sustainable repayment.

However, supervisory experience has shown that in many cases, forbearance solutions granted by banks to borrowers in financial difficulties are not fully in line with that objective and thus may delay necessary actions to tackle asset quality issues and lead to a misrepresentation of asset quality on the balance sheet. This is the case, for instance, when forbearance measures consist of repeated grace periods but do not address the fundamental issue of the over-indebtedness of a borrower compared with its repayment capacities.

For this reason, this chapter has a particular focus on viable forbearance solutions. The supervisory expectation is that banks should implement well-defined forbearance policies aligned with the concept of viability and recognise in a timely manner those borrowers who are non-viable.

The chapter starts with an overview of forbearance options and provides guidance on how to distinguish between viable and non-viable forbearance measures (section 4.2). It then expands on important aspects with regard to forbearance processes, with the focus on affordability assessments (sections 4.3 and 4.4) and on supervisory reporting and public disclosures (section 4.5).

In addition, chapter 5 provides guidance regarding the criteria for classifying forborne exposures as non-performing or performing.

4.2 Forbearance options and their viability

When looking at different forbearance solutions, it is useful to distinguish between short-term and long-term measures implemented via forbearance. Most solutions will involve a combination of different forbearance measures, potentially over a different time horizon with a mix of short-term and long-term options.

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[30] The guidance in this chapter applies to forbearance as defined by the EBA and elaborated in section 5.3. See the EBA Implementing Technical Standards on supervisory reporting on forbearance and non-performing exposures under Article 99(5) of Regulation (EU) No 575/2013. Based on Commission Implementing Regulation (EU) 2015/227 of 9 January 2015 amending Implementing Regulation (EU) No 680/2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council (OJ L 48, 20.2.2015, p. 1).

Short-term forbearance measures are defined as restructured repayment conditions of a temporary nature designed to address financial difficulties in the short-term, but which do not address the resolution of outstanding arrears unless combined with suitable long-term measures. Such short-term measures should generally not exceed two years and, in the case of project finance and the construction of commercial property, one year.

Short-term forbearance measures should be considered and offered when the borrower meets the two following criteria.

- The borrower has experienced an identifiable event which has caused temporary liquidity constraints. Evidence of such an event should be demonstrated in a formal manner (and not speculatively) via written documentation with defined evidence showing that the borrower's income will recover in the short-term or on the basis of the bank concluding that a long-term forbearance solution was not possible due to a temporary financial uncertainty of a general or borrower-specific nature.
- The borrower has tangibly exhibited a good financial relationship with the bank (including significant repayment of capital outstanding prior to the event) and demonstrates clear willingness to cooperate.

The contractual terms for any forbearance solution should ensure that the bank has the right to review the agreed forbearance measures if the situation of the borrower improves and more favourable conditions for the bank (ranging from the forbearance to the original contractual conditions) could therefore be enforced. The bank should also consider including strict consequences in the contractual terms for borrowers who fail to comply with the forbearance agreement (e.g. additional security).

Viable versus non-viable forbearance

Banks and supervisors have a clear need to distinguish between "viable forbearance" solutions, i.e. those that truly contribute to reducing the borrower's balance of credit facilities, and "non-viable" forbearance solutions.

The following list outlines general supervisory guidance for the categorisation of viable forbearance (further guidance on individual forbearance options is provided in the table below):

- In general, a forbearance solution including long-term forbearance measures should only be considered viable where:
  - The institution can demonstrate (based on reasonable documented financial information) that the borrower can realistically afford the forbearance solution.
  - The resolution of outstanding arrears is fully addressed and a significant reduction in the borrower's balance in the medium to long term is expected.

    - In cases where there have been previous forbearance solutions granted in respect of an exposure, including any previous long-term forbearance measures, the bank should ensure that additional internal controls are implemented to ensure this subsequent forbearance treatment meets the viability criteria as outlined below. These controls should include, at a minimum, that such cases are explicitly brought to the attention of the risk control function ex ante. Furthermore, explicit approval of the relevant senior decision-making body (e.g. NPL Committee) should be sought.

- In general, a forbearance solution including short-term forbearance measures should only be considered viable where:

    - The institution can demonstrate (based on reasonable documented financial information) that the borrower can afford the forbearance solution.

    - Short-term measures are truly applied temporarily and the institution has satisfied itself and is able to attest, based on reasonable financial information, that the borrower demonstrates the ability to repay the original or agreed modified amount on a full principal and interest basis commencing from the end of the short-term temporary arrangement expiry date.

    - The solution does not result in multiple consecutive forbearance measures having been granted to the same exposure.

As indicated in the listed criteria, any assessment of viability should be based on the financial characteristics of the debtor and the forbearance measure to be granted at that time. It should also be noted that the viability assessment should take place irrespective of the source of forbearance (for instance debtor using forbearance clauses embedded in a contract, bilateral negotiation of forbearance between a debtor and a bank, public forbearance scheme extended to all debtors in a specific situation).

List of most common forbearance measures

As indicated above, most forbearance solutions will involve a combination of different measures. The table below summarises the most common short-term and long-term forbearance measures and provides further indications with regard to viability considerations. It should be noted that package of long-term measures might include short-term measures such as interest only, reduced payments, grace period or arrears capitalisation for a limited timeframe, as indicated above.

List of most common forbearance measures

Forbearance measure	Description	Viability and other important considerations
Short-term measures		
1. Interest only	During a defined short-term period, only interest is paid on credit facilities and no principal repayment is made. The principal amount thus remains unchanged and the terms for the repayment structure are reassessed at the end of the interest-only period, subject to the assessed repayment ability.	This measure should only be granted/considered viable if the institutions can demonstrate (based on reasonable documented financial information) that the financial difficulties experienced by the borrower are of a temporary nature and that after the defined interest-only period the borrower will be able to service the loan at least based on the previous repayment schedule. The measure should generally not exceed a period of 24 months and, in the case of construction of commercial property and project finance, 12 months. Once the defined period of this forbearance measure is over, institutions should reassess the borrower's debt servicing capacity in order to proceed with a revised repayment schedule that is able to account for the unpaid capital element during this interest-only period. In most cases, this measure will be offered in combination with other measures of a longer-term nature to compensate for the temporary lower repayments (e.g. extension of maturity).
2. Reduced payments	Decrease of the amount of repayment instalments over a defined short-term period in order to accommodate the borrower's affected cash flow situation and then continue with the repayments on the basis of projected repayment ability. The interest remains to be paid in full.	See "1. Interest only" If the amount of payment reduction is moderate and all other conditions mentioned above are met, this measure could be applied for a period longer than 24 months.
3. Grace period/payment moratorium	An agreement allowing the borrower a defined delay in fulfilling the repayment obligations, usually with regard to the principal and interest.	See "1. Interest only"
4. Arrears/interest capitalisation	Forbearance of arrears and/or accrued interest arrears by the addition of those unpaid amounts to the outstanding principal balance for repayment under a sustainable rescheduled programme.	The measure should only be granted/considered viable where the institution has assessed that the borrower's verified income/expenditure levels (based on reasonable documented financial information) and the proposed revised repayments are sufficient to enable the borrower to service the revised loan repayment on a principal and interest basis for the duration of the revised repayment schedule; and where the institution has formally sought confirmation that the customer understands and accepts the capitalisation conditions. Arrears capitalisation should only be provided selectively in cases where the recovery of historical arrears or payments due under the contract is not possible and capitalisation is the only option realistically available. Institutions should generally avoid offering this measure to a borrower more than once; and the measure should only be applied to arrears that do not exceed a predefined size relative to the overall principal (which should be defined in the bank's forbearance policy). The institution should assess the percentage of arrears being capitalised compared to the principal and interest repayments as adequate and appropriate for the borrower.
Long-term measures		
5. Interest rate reduction	Permanent (or temporary) reduction of interest rate (fixed or variable) to a fair and sustainable rate.	Credit facilities with high interest rates are one of the common causes of financial distress. The financial difficulties of a borrower may partly derive from the fact that the interest rates are excessively high compared to the income of the borrower or from the fact that the evolution of interest rates, as opposed to a fixed rate, has resulted in the borrower receiving finance at an exorbitant cost, compared with prevailing market conditions. In such cases, an interest rate reduction could be considered. However, banks should ensure that the relevant credit risk is sufficiently covered by the interest rate offered to the borrower. It should be clearly flagged if the affordability can only be achieved at below-risk or below cost rates.
6. Extension of maturity/term	Extension of the maturity of the loan (i.e. of the last contractual loan instalment date), which allows a reduction in instalment amounts by spreading the repayments over a longer period.	If the borrower is subject to a compulsory retirement age, term extension should only be considered viable where the institution has assessed and can demonstrate that the borrower can, through a pension or other sources of verified income, service the revised loan repayments on an affordable basis.
7. Additional security	When additional liens on unencumbered assets are obtained as additional security from the borrower in order to compensate for the higher risk exposure and as part of the restructuring process.[31]	This option is not a viable standalone forbearance measure as it does not by itself resolve the presence of arrears on a loan. It usually aims to improve or cure loan-to-value (LTV) ratio covenants. Additional security may take many forms, such as a pledge on a cash deposit, assignment

[31] Taking additional security does not automatically result in a classification of the respective exposure/client as "forborne", although in most cases it coincides with forbearance measures being taken.

		of receivables or a new/additional mortgage on immovable property. Institutions should value second and third liens on assets as well as personal guarantees with care.
8. Sale by agreement/assisted sale	When the bank and the borrower agree to voluntarily dispose of the secured asset(s) to partially or fully repay the debt.	The institution should restructure any residual debt post the assisted sale with an appropriate repayment schedule in line with the borrower's reassessed repayment ability. For forbearance solutions which may require the sale of the property at the end of the term, banks should conservatively consider the future approach to any shortfall that could remain after the sale of the property and address it as early as possible. For loans that are repaid by repossession of collateral at a predefined moment, the repossession does not constitute a forbearance measure unless it is exercised ahead of the predefined moment due to financial difficulties.
9. Rescheduled payments	The existing contractual repayment schedule is adjusted to a new sustainable repayment programme based on a realistic, current and forecasted assessment of the borrower's cash flows	Different repayment example options include: i. Partial repayment: When a payment is made against the credit facility, e.g. from a sale of assets that is lower than the outstanding balance. This option is applied to significantly reduce the exposure at risk and to enable a sustainable repayment programme for the remaining outstanding amount. This option should be preferred to the bullet or step-up options described below. ii. Balloon or bullet payments: When the rescheduled repayment ensures a large payment of the principal at a later date before loan maturity. This option should only be used/considered viable in exceptional circumstances and when the institution can duly demonstrate future cash flow availability by the borrower to meet the balloon or bullet payment. iii. Step-up payments: Institutions should only consider a solution including this option viable when they can ensure, and are able to demonstrate, that there is good reason to expect that future increases in payments can be met by the borrower.
10. Conversion of currency	When the currency of the debt is aligned to the currency of the cash flows.	Banks should explain fully to borrowers the risks of foreign exchange and should also refer to currency conversion insurance.
11. Other alteration of contract conditions/covenants	When the bank discharges the borrower of covenants or conditions included in a loan agreement not yet listed above.	
12. New credit facilities	Providing new financing arrangements in order to support the recovery of a distressed borrower.	This is usually not a standalone viable forbearance solution, but should be combined with other forbearance measures addressing existing arrears. It should only be applied in exceptional cases. New credit facilities may be granted during a restructuring agreement, which may entail the pledge of additional security. In the case of inter-creditor arrangements, the introduction of covenants should be necessary to compensate for the additional risk incurred by the bank. This option should be usually applied for corporate exposures only and a thorough assessment of the borrower's ability to pay should be performed, including sufficient involvement of independent sector experts to judge on the viability of provided business plans and cash-flow projections. It should only be considered viable when the thorough affordability assessment demonstrates repayment capacity in full.
13. Debt consolidation	Entails the combination of multiple exposures into a single loan or a limited number of loans.	This is usually not a viable standalone forbearance measure, but needs to be combined with other forbearance measures addressing existing arrears. This option is particularly beneficial in situations where combining collateral and secured cash flows provides greater overall security coverage for the entire debt than individually. For example, by minimising cash leaks or by facilitating re-allocation of cash flow surplus between exposures.
14. Partial or total debt forgiveness	This corresponds to the bank forfeiting the right to legally recover part or the whole of the amount of debt outstanding by the borrower.	This measure should be used where the bank agrees to a "reduced payment in full and final settlement", whereby the bank accepts to forgive all of the remaining debt if the borrower repays the reduced amount of the principal balance within an agreed timeframe. Banks should apply debt forgiveness options carefully since the possibility of forgiveness can give rise to moral hazard and thus might encourage "strategic defaults". Therefore, institutions should define specific forgiveness policies and procedures to ensure strong controls are in place.

The above list of measures is not to be considered exhaustive and there may be further common forbearance approaches also linked to national specificities. One example is the split loan solution as applied in certain jurisdictions for non-performing residential mortgages, which has been developed as a consequence of difficulties in enforcing the underlying collateral.

4.3 Sound forbearance processes

Further to the guidance provided on the governance and operation of NPL workout processes in chapter 3 of this guidance (e.g. referring to separate NPL WUs for forbearance activities), this section highlights further best practices specifically related to forbearance processes.

No forbearance without borrower affordability assessment

Before granting any forbearance measures, the lending officer responsible should conduct a complete assessment of the borrower's financial situation. This includes the assessment of all relevant factors, taking particular account of the debt servicing capacity and overall indebtedness of the borrower or the property/project. This assessment should be based on documented current and verified financial information. (See section 4.4 for more details on affordability assessments).

Standardised forbearance products and decision trees

The institution should have adequate policies and procedures in place with a range of sustainable and effective solutions for the borrower when granting forbearance. Portfolio segmentation (see section 3.3.2) is a key part of any strategy as it enables the institutions to adopt and tailor different forbearance solutions to different segments of the loan books.

In this context, the institution should consider developing "decision trees" and related standardised forbearance solutions (or "products") for segments of heterogeneous borrowers with less complex exposures. Decision trees may help to determine and implement appropriate and sustainable forbearance (and more generically NPL workout) strategies for specific segments of borrowers in a consistent manner based on approved criteria. They may also help to foster the standardisation of processes.

Comparison with other NPL workout options

Banks should use a net present value (NPV) approach to determine the most suitable and sustainable workout option for borrowers' varied circumstances, i.e. the NPV of the envisaged forbearance solution should be compared with the NPV of repossession and other available liquidation options. Parameters used in the calculation, such as the assumed liquidation time horizon, discount rate and extent of reflection of capital cost, and liquidation cost should be based on observed empirical data. Banks should review the range of workout options on an on-going basis and investigate the feasibility of new/alternative options.

Forbearance milestones and monitoring

The forbearance contract and documentation should include a well-defined borrower milestone target schedule, detailing all necessary milestones to be achieved by the borrower in order to repay the loan over the course of the contract term. These milestones/targets should be credible, appropriately conservative and take account of any potential deterioration of the borrower's financial situation. The performance of the forborne borrower, including the borrower's compliance with all agreed milestones/targets, should be closely monitored by the NPL WU responsible for granting the forbearance, at least for the duration of the EBA-defined probation period.

Based on the collective monitoring of the performance of different forbearance options and on the examination of potential causes and instances of re-defaults (inadequate affordability assessment, issue with the characteristics of the forbearance treatment product, change in the borrower's conditions, external macroeconomic effects etc.), institutions should regularly review their forbearance policies and products.

4.4 Affordability assessments

The affordability assessment of the borrower should be based on the borrower's current and conservatively assessed prospective future servicing capacity for all borrowings. In this context, assumed prospective future increases in the debt servicing ability of the borrower should be credible and conservative.

The main areas for banks to analyse in the context of a borrower affordability assessment, depending on the segment, are the following:

- regular/recurring income;
- expenditure;
- other assets;
- other debt;
- reasonable living expenses;
- employment prospects;
- property attractiveness/outlook;
- cash flows and business plan (also see section 6.2.4);
- willingness to repay (behaviour history) and cooperativeness.

For the comprehensive and verified disclosure of the borrower's financial position in order to analyse exposures, institutions should develop standardised financial information templates for retail borrowers and homogeneous segments of corporate

borrowers (if proportionate). Internal processes should ensure the proper and timely completion of these templates.[32]

External information sources like central credit registers should also be used to inform the bank regarding the overall indebtedness of the borrower and to analyse the wider borrower behaviour profile.

The affordability assessment should be based on reasonable documented and verified borrower income and expenditure levels. Banks should satisfy themselves, and be able to demonstrate, that appropriate conservatism has been applied in relation to the variable elements of current income that are taken into account. In particular, the assumptions used should be fair and reasonable and should incorporate key economic indicators relevant to the future capacity of the borrower. For example, variable elements of pay and/or rental income etc. should be discounted (applying haircuts) to reflect the possibility that they will not be realised. All assumptions should be documented on the credit file to ensure that an audit trail is in place.

Future income increases should only be taken into account where there is sound reason to expect that those increases will be realised. Banks should also satisfy themselves, and be able to demonstrate, that adequate conservatism has been applied in considering the extent to which future increases are taken into account. Unless specific information exists to the contrary, assumed salary increases, bonuses, overtime, career progression, increases in rental income and any other increases should not be out of line with industry/sector/market norms and may need to be discounted (applying haircuts) to reflect the risk that they will not be fully realised.

Annex 6 specifies borrower affordability assessment and documentation expectations in more detail for retail and corporate borrowers.

4.5 Supervisory reporting and public disclosures

Supervisors expect consistent disclosures on forbearance, especially on key areas including credit quality of forbearance, quality and effectiveness of forbearance and ageing profile of forbearance on a regulatory portfolio basis. To facilitate consistent disclosures on forbearance, banks should submit the quantitative information and standard templates as included in the Annex 7 of this guidance. The management body should approve this information prior to submission to supervisory authorities.

[32] For examples of templates issued by the Central Bank of Cyprus and Central Bank of Ireland see: Template Cyprus and Template Ireland

5 NPL recognition

5.1 Purpose and overview

NPE definition

The commonly used term “non-performing loan” (NPL) is based on different definitions. The EBA therefore issued a uniform definition of “non-performing exposure” (NPE) in order to overcome the problems deriving from the existence of different definitions.

However, the NPE definition is – strictly speaking – currently only binding for supervisory reporting purposes.[33] Nevertheless, institutions are strongly encouraged to use the NPE definition also in their internal risk control and public financial reporting. Furthermore, the NPE definition is used in several relevant supervisory exercises (e.g. SSM asset quality review (AQR), EBA stress test and transparency exercises).

The purpose of this chapter is to provide a short outline on selected issues regarding the definition and recognition of NPEs in accordance with the EBA definition and to give some best practice examples to reduce the diversity in implementation.

Section 5.2 starts by providing guidance on the definition of NPEs, as referred to in Commission Implementing Regulation (EU) No 680/2014 (referred to as the “EBA ITS on supervisory reporting”)[34], with the aim of ensuring the consistent implementation of the key drivers of the NPE definition, namely the “past-due” criterion and the “unlikely-to-pay” criterion. Section 5.3 deals with the close links between the NPE definition and the forbearance definition. Section 5.4 addresses further important aspects related to the consistent and accurate implementation of the NPE definition, such as the identification of identical or connected clients.

Regulatory versus accounting view

Section 5.5 explains the links between the supervisory definition of NPEs and the accounting definition of “impaired” (International Accounting Standard (IAS) 39) and the prudential definition of “default” (CRR). One of the aims of the NPE definition is to make data more comparable by overcoming the differences in the default and

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[33] Information on NPEs is collected regularly in the context of financial reporting using several FINREP templates, including in table F.18 of Annexes III and IV of Commission Implementing Regulation (EU) 680/2014, in which performing and non-performing exposures, and associated accumulated credit losses, are broken down by measurement basis, type of exposure, counterparty and trigger for classification as NPEs.

[34] See footnote 29.

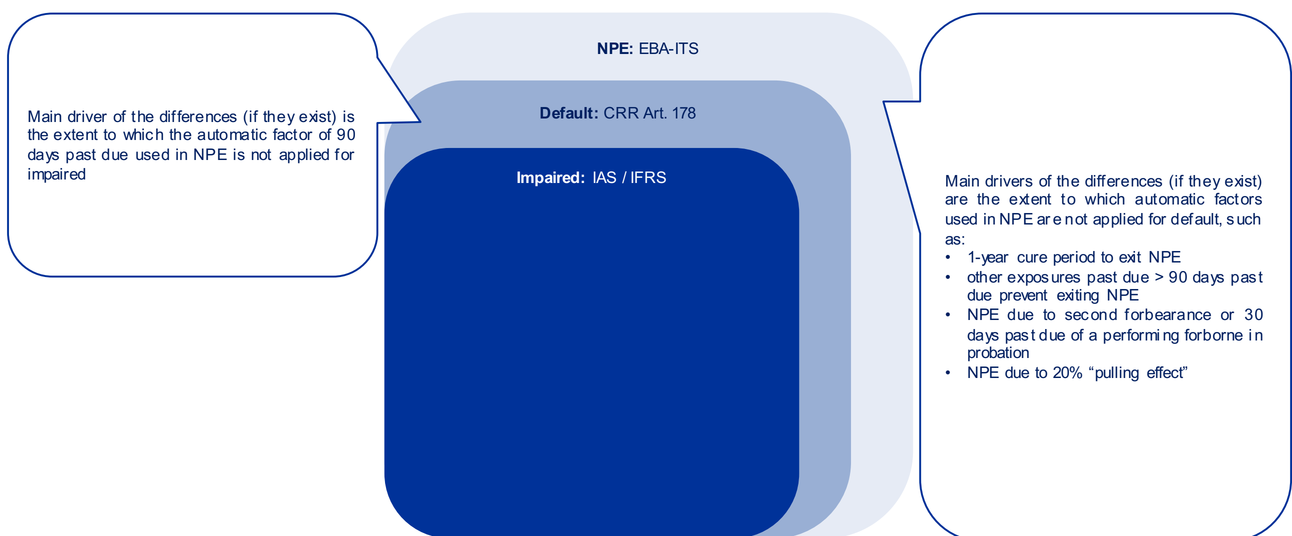
impaired definition across the EU. To this extent, the non-performing definition should act as a harmonised asset quality concept.

In recent years, a significant amount of guidance has emerged of relevance to the regulatory default definition, most notably the "Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013" (EBA GL 2016/07) and the "Regulatory Technical Standards on the materiality threshold for credit obligations past due under Article 178 of Regulation (EU) No 575/2013" (EBA RTS 2016/06). In addition, the Basel Committee on Banking Supervision's Guidance on credit risk and accounting for expected credit losses (referred to as "BCBS Guidance on CRAECL") was published in December 2015.

Paragraph 147 of Annex V of the EBA ITS on supervisory reporting states that "Exposures in respect of which a default is considered to have occurred in accordance with Article 178 CRR and exposures that have been found impaired in accordance with the applicable accounting framework shall always be considered as non-performing exposures".

The relationship between the different definitions can be seen in the graph below. NPE is a concept potentially broader than the concept of "impaired" and "default". All impaired exposures and all defaulted exposures are necessarily NPEs, but NPEs can also encompass exposures that are not recognised as impaired or as defaulted in the applicable accounting or regulatory framework. The exact relationship will be treated in section 5.5.

Figure 2
Illustrative connection between NPE, defaulted and impaired definitions



5.2 Implementation of the NPE definition

According to paragraph 145 of Annex V of the EBA ITS on supervisory reporting "non-performing exposures are those that satisfy either or both of the following criteria:

1. material exposures which are more than 90 days past-due;
2. the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past-due amount or of the number of days past due."

Therefore, the definition of NPE is based on the "past-due" criterion and the "unlikely-to-pay" criterion, which are discussed in this section.

5.2.1 Remarks on the "past-due" criterion and day counting

Paragraph 145(a) of Annex V of the EBA ITS on supervisory reporting defines the past-due criterion. Material exposures with amounts more than 90 days past due are considered to be non-performing. The materiality threshold to be used should be the same as in the definition of default in accordance with Article 178 of the CRR, as specified in the relevant EBA RTS 2016/06 (section 3.4).

An exposure can only be past due if there was a legal obligation to make a payment and payment is compulsory. In the event that there is no legal obligation or payment is not compulsory, non-payment does not constitute a breach. For example, non-payment of discretionary interest on an Additional Tier 1 capital instrument does not constitute a past-due situation. However, banks should carefully assess whether non-payment of discretionary interest is linked to other events for classification as non-performing.

In cases where it is uncertain whether a legal obligation already exists, banks should carefully consider the situation. When an exposure to a debtor is identified as an NPE but that NPE identification (most likely via the past-due criterion) actually results solely from isolated disputes that are unrelated to the solvency of the counterparty, then other exposures to entities from the same group as the debtor do not need to be considered as NPEs.

Once the legal obligation for a mandatory payment has been established, the counting of days past due starts as soon as any material amount of principal, interest or fee has not been paid at the date it was due.

Banks may use or be required to use cash allocation conventions, such as first in, first out (FIFO), which assumes that any received payments always settle the earliest payment obligation missed by the clients. Within the FIFO allocation conventions, laws or regulations may specify whether a cash payment should first settle unpaid interest or unpaid principal.

The definition of NPE does not require the use of a specific allocation convention or any order of priority between unpaid interest and unpaid principal. The allocation convention and order of priority used should be the one prescribed by applicable law or regulation. In the event that applicable laws or regulations are silent, the allocation and order of priority used should be allowed for in the respective loan contract and should not contradict any other law or regulation, in particular consumer protection rights, or insolvency or bankruptcy laws. This may require the use of different conventions for different contracts. For instance, it means that if the applicable law is silent and a particular loan contract or other laws prohibit the use of the FIFO convention, the first past-due instalment on that contract will not be settled until all other missed instalments have been cleared.

5.2.2 Remarks on the “unlikely-to-pay” criterion

In contrast with triggers relating to past-due payments, the triggers relating to unlikeliness to pay as referred to in paragraph 145(b) of Annex V of Commission Implementing Regulation (EU) No 680/2014 rely less on quantitative criteria but define some events that trigger the non-performing classification. As this gives some leeway for interpretation, it is imperative for banks to have clearly defined internal criteria to identify indicators of unlikeliness to pay (UTP). These indicators should refer to clearly defined situations (UTP events). Banks should ensure that the definition of NPE and the criteria for identifying UTP are implemented homogeneously in all parts of the group.

Banks should have pre-defined automatic events – wherever possible – and manual events in place. In the case of automatic events, the exposure is automatically identified as non-performing without any further manual inputs or the need for a manual confirmation. Examples of automatic events are bankruptcy of the debtor, which can be ascertained based on data from bankruptcy registers, or the booking of specific credit adjustments. However, most triggers linked to the UTP criterion require regular manual assessments. Therefore, a bank should regularly assess the creditworthiness and repayment capacity of its customers. For standard non-retail customers this should be done, at least, at key reporting dates. These reviews should be accompanied by updated financial information and an updated rating of the customer. Banks should collect the latest financial information from non-retail customers in a timely fashion, ideally based on a contractual requirement for the customer to provide the credit institution with this information within a given timescale. The non-provision or the unreasonably late provision of information may be seen as a negative sign for the customer’s creditworthiness. For customers who have been identified as financially weak, such as customers on a watch-list or with a weak rating, more frequent review processes should be in place depending on the materiality, segment and the customer’s financial standing.

Realisation of collateral and unlikeliness to pay (UTP)

According to paragraph 148 of Commission Implementing Regulation (EU) No 680/2014, the classification of exposures as non-performing should be done without taking into account the existence of any collateral. Consequently, all exposures, even fully collateralised ones, in unlikely-to-pay situations should always be classified as non-performing.

External data sources and UTP recognition

When relying on external data sources, banks should ensure the equivalence of their definition of UTP with that of non-performing, or if applicable the default definition used in the external data sources, including by making adjustments, consistently with the provisions of Article 178 (4) of the CRR for the definition of default. Examples of such external data sources are bankruptcy registers, company registers in the event that different events are registered (bankruptcies, actions and sanctions imposed by authorities which may indicate a UTP situation), real estate or land registers, pledge registers (which may provide information on a UTP situation if a third party registers an enforcement order against a customer) as well as credit registers. Wherever such data is accessible and provides useful information for the identification of UTP situations, credit institutions should ensure an automatic data feed from external sources to their systems. If no automatic data feed can be established, for instance because no unique identifiers are available, banks should nevertheless check these registers on a regular basis, e.g. during customer reviews, in order to ensure a proper identification of UTP situations.

Best practice examples of UTP events

When defining the set of UTP events, banks should take into account the situations and events listed in the CRR definition of default and in the IFRS definition of impairment requirements, considering that all defaulted exposures and all impaired exposures are to be identified as non-performing. Additional triggers to identify NPEs that are not explicitly listed in Article 178 of the CRR or in the definition of impairment in the applicable accounting framework should be considered where relevant. The alignment of UTP events is recommended for operational purposes when setting up internal CRR default, IFRS impairment and NPE identification processes.

Different sets of UTP triggers may be defined on a portfolio-by-portfolio basis (mortgages, SMEs, commercial real estate (CRE), corporates, etc.). For instance, for mortgage portfolios UTP triggers such as debt service coverage capacity or loan to value (LTV) are highly relevant, whereas in the case of SME portfolios triggers related to the financial performance of debtors (e.g. decrease of turnover) might be considered. These reviews should be accompanied by updated financial and non-financial information and an updated rating of the customer.

Table 2 below provides supervisory guidance for the implementation of the UTP triggers. The column on the right-hand side lists UTP events which can be found in various international banks (best practice) as well as events based on the impairment triggers used during the AQR exercises in 2014 and 2015 and the Draft EBA Guidelines on the CRR definition of default. This list is not exhaustive, nor should it serve as a prescription of a minimum set of UTP criteria. It should rather be seen as a list of examples and best practices and as an orientation point as to how the definition of non-performing can be implemented.

Nevertheless, it is expected that the indicators in white will lead directly to a recognition of non-performing, as in most cases these events, by their very nature, directly fulfil the definition of UTP and there is little room for interpretation. The triggers shown in grey are “soft” triggers and should be seen as indicative examples of UTP. If one of these triggers applies, this does not automatically mean that an exposure is non-performing, but that a thorough assessment should be performed. With regard to these soft triggers (i.e. AQR examples), fixed thresholds for single UTP triggers are difficult to define and calibrate given the differences in underwriting practices, regulations, tax regimes and average incomes across jurisdictions. Thus, banks should develop their own thresholds based on national specifics.

The regular assessment of the borrower repayment capabilities should also apply to bullet loans: the mere continuous payment by the borrower of the interest amounts due is not enough to assume that the final bullet repayment of the loan will take place and that the exposure is therefore to be regarded as performing. For bullet loans, the UTP triggers in the following table should be applied on a selective basis. Special emphasis should be placed on the availability of refinancing/roll-over options for such customers, which will depend to a large degree on the financial strength of the customer and the collateralisation of the loan. In addition, the economic lifetime of projects and the ability to repay the exposure within this lifetime should be a factor for determining the correct classification of bullet loans.

Table 2

Interrelation between non-performing, default and impairment "Unlikely-To-Pay" indicators[35]

Article 178 CRR UTP events	IAS 39.58 impairment triggers	Non-performing UTP events White: indicators Grey: examples
1 (a) The institution considers that the obligor is unlikely to pay its credit obligations to the institution, the parent undertaking or any of its subsidiaries in full, without recourse by the institution to actions such as realising security.	(a) significant financial difficulty of the issuer or obligor;	loan is accelerated or called
		institution has called any collateral including a guarantee (EBA) *)
		lawsuit, execution or enforced execution in order to collect debt
		license of the borrower is withdrawn **)
		the borrower is a co-debtor when the main debtor is in default
		postponements/extensions of loans beyond economic lifetime ***)
		postponements/extensions in the event that a significant economic loss is likely (indicator: balloon payments, strongly increasing payments)
		multiple restructurings on one exposure
		a borrower's sources of recurring income are no longer available to meet the instalment payments (EBA); customer becomes unemployed and repayment is unlikely
		there are justified concerns about a borrower's future ability to generate stable and sufficient cash flows (EBA)
		the borrower's overall leverage level has significantly increased or there are justified expectations of such changes to leverage (EBA); equity reduced by 50% within a reporting period due to losses
		for exposures to an individual: default of a company fully owned by a single individual where this individual provided the institution with a personal guarantee for all obligations of the company (EBA)
		a financial asset was purchased or originated at a material discount that reflects the deteriorated credit quality of the debtor (EBA)
		for retail exposures where the default definition is applied at the level of an individual credit facility, the fact that a significant part of the total obligation of the obligor is in default (EBA)
		debt service coverage ratio indicates that debt is not sustainable
		5Y credit default swaps (CDS) above 1.000 bps in the last 12 months
		loss of major customer or tenant
		material decrease of turnover/operating cash flows (20%)
		connected customer has filed for bankruptcy
		restricted or qualified opinion of external auditor
		it is expected that a bullet loan cannot be refinanced at current market conditions
		disappearance of refinancing options
		fraud cases
	(b) a breach of contract, such as a default or delinquency in interest or principal payments	breach of the maximum LTV in the case of asset-based finance or margin call not met ****)

[35] This table is not intended to provide a precise mapping of the NPE criteria to either UTP indicators or the accounting criteria for impairment, but rather to show similarities and possible overlaps.

		the borrower has breached the covenants of a credit contract (EBA)
	e) the disappearance of an active market for that financial asset because of financial difficulties	disappearance of an active market for the debtor's financial instruments
3 (a) Institution puts the credit obligation on non-accrued status.	(c) the lender, for economic or legal reasons relating to the borrower's financial difficulty, grants the borrower a concession that the lender would not otherwise consider	credit institution stops charging of interest (also partially or conditionally)
		direct write-off
3 (b) Institution recognises a specific credit adjustment resulting from a significant perceived decline in credit quality subsequent to the institution taking on the exposure.		write-off against provisions
		value adjustment (specific loan loss provisions (LLP) booking)
3 (c) Institution sells the credit obligation at a material credit-related economic loss.		claim sold with loss which is credit-related
3 (d) Institution consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness or postponement of principal, interest, or, where relevant, fees. This includes, in the case of equity exposures assessed under a probability of default/loss-given default (PD/LGD) approach, distressed restructuring of the equity itself.	(c) the lender, for economic or legal reasons relating to the borrower's financial difficulty, grants the borrower a concession that the lender would not otherwise consider	restructuring with a material part which is forgiven (net present value (NPV) loss)
		restructuring with conditional forgiveness
3 (e) Institution has filed for the obligor's bankruptcy or a similar order in respect of an obligor's credit obligation to the institution, the parent undertaking or any of its subsidiaries.	d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation	credit institution or leader of consortium starts bankruptcy/insolvency proceedings
		International Swaps and Derivatives Association (ISDA) credit event declared
		out-of-court negotiations for settlement or repayment (e.g. stand-still agreements)
3 (f) Obligor has sought or has been placed in bankruptcy or similar protection, where this would avoid or delay repayment of a credit obligation to the institution, the parent undertaking or any of its subsidiaries.	d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation	obligor has filed for bankruptcy or insolvency
		third party has started bankruptcy or insolvency proceedings
		payment moratorium (sovereigns, institutions)

*) If collateral or a guarantee is called, this usually means that the non-performing definition is directly fulfilled (realisation of collateral).
**) The withdrawal of a license is especially relevant in the context of companies which need a public license to conduct their business, such as banks and insurance companies. In some Member States this can also encompass companies such as telecommunications and media companies, pharmaceutical companies, mining and extraction companies or transport companies.
***) Economic lifetimes are especially important in the context of project-financing types of loans. Generally, the expected net cash flow from a project during its economic lifetime should exceed the loan obligation including interest payments. Beyond the economic lifetime, cash flows are typically less reliable and less plannable due to factors such as obsolescence, the need for major re-investments or refurbishments and an increasing likelihood of technological failure. Economic lifetimes do not represent maximum tenors, which can or should be approved when granting loans. Nevertheless, a debtor can be expected to be in financial difficulties if cash flows from a project are not sufficient to service loan obligations within its economic lifetime.
****) Asset-based loans can appear in different forms (Lombard loans, margin loans, asset-based secured by real estate – such as reverse mortgages, asset-based secured by receivables etc.), but they have in common the fact that the institution does not rely on the borrower's income or cash flow to repay the loan, but instead lends money against an asset. Borrowers are typically required to maintain a certain loan-to-value ratio throughout the lifetime of the loan. This loan-to-value ratio can also appear in the form of a minimum equity covenant, e.g. in the case of real estate finance. If this ratio is exceeded, the borrower has to replenish the equity stake ("margin call") or the credit institution has the right to call the loan and to sell the collateral. Typically, banks also have significantly higher initial equity requirements for asset-based loans than for secured cash-flow-based loans. This is required in order to maintain a cushion for volatility of the price of collateral and to cover the cost of selling the collateral.

5.3 Link between NPEs and forbearance

5.3.1 General definition of forbearance

For the purposes of this guidance the EBA definition of "forbearance" in Commission Implementing Regulation (EU) No 680/2014, in particular paragraphs 163-183 of Annex V, is used. This section focuses on aspects of this definition where supervisors have noted inconsistent implementation.

Forbearance measures consist of “concessions“ extended to any exposure – in the form of a loan, a debt security as well as a (revocable or irrevocable) loan commitment – towards a debtor facing or about to face difficulties in meeting its financial commitments (“financial difficulties”). It means that an exposure can only be forborne if the debtor is facing financial difficulties which have led the bank to make some concessions.

According to paragraph 164 of Annex IV of Commission Implementing Regulation (EU) No 680/2014, a concession refers to either of the following actions:
i) modification of the previous terms and conditions of the contract, or ii) total or partial refinancing of the exposure. Therefore, the definition of concession is a broader one and is not restricted to modifications where the net present value of cash flows from the exposure is influenced.

Proper identification of forbearance supposes the ability to identify signs of possible future financial difficulties at an early stage. In order to do so, an assessment of the financial situation of the borrower should not be limited to exposures with apparent signs of financial difficulties. An assessment of financial difficulties should also be conducted for exposures where the borrower does not have apparent financial difficulties, but where market conditions have changed significantly in a way that could impact the ability to repay. Examples of such exposures are bullet loans where the repayment relies on a sale of real estate (e.g. drop in real estate prices impacts affordability) or foreign currency loans (e.g. move in underlying exchange rate impacts affordability).

The assessment of any financial difficulties on the part of a debtor should be based on the situation of the debtor only, disregarding collateral or any guarantees provided by third parties.

To identify the condition of financial difficulties of the debtor the following triggers can be used (not an exhaustive list):

- debtor/facility more than 30 days past due during the three months prior to its modification or refinancing;
- increase of probability of default (PD) of institution’s internal rating class during the three months prior to its modification or refinancing;
- presence in watch-list during the three months prior to its modification or refinancing.

Exposures should not be identified as forborne when concessions are made to debtors that are not in financial difficulties. Banks should distinguish between renegotiations or rollovers granted to debtors not in financial difficulties and forbearance measures (i.e. concessions granted to debtors in financial difficulties).

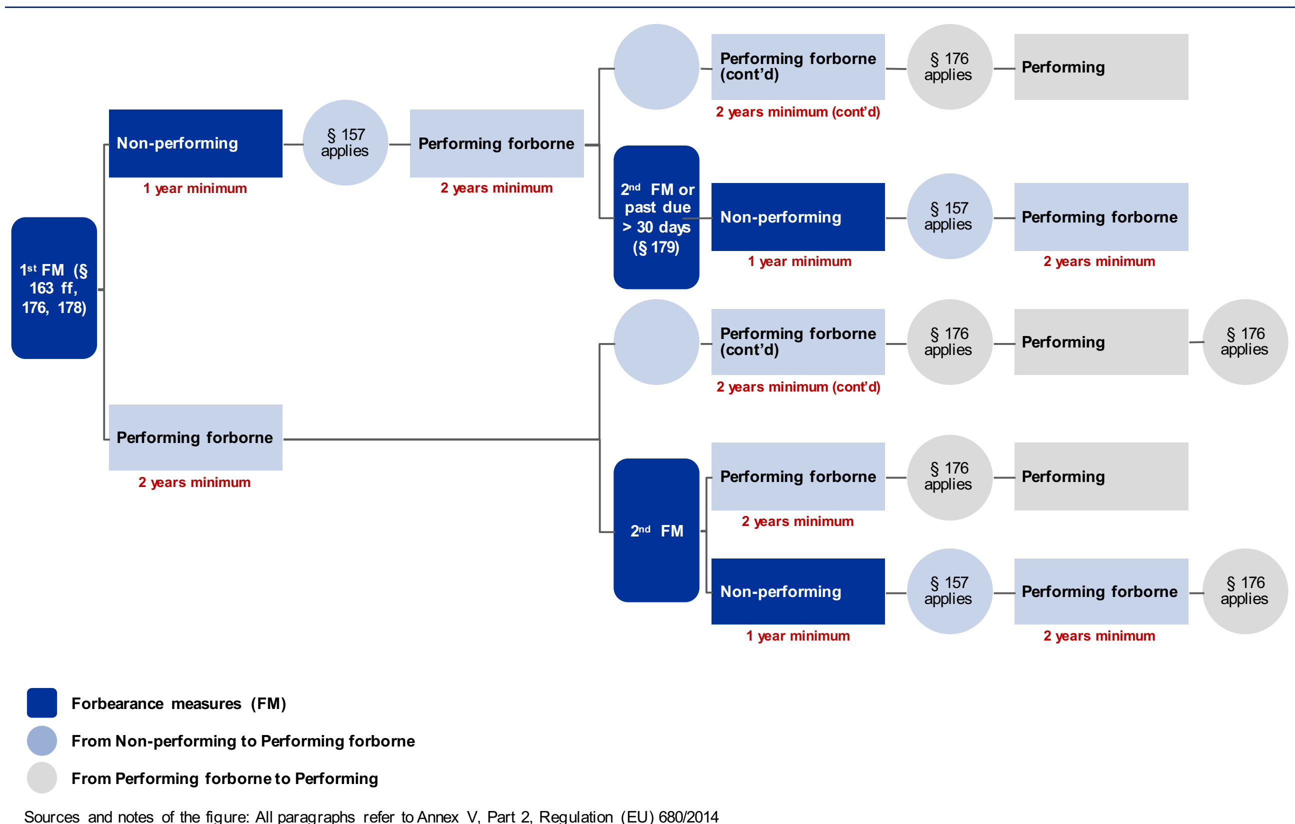
Granting new conditions such as a new interest rate more favourable than the rate debtors with a similar risk profile could obtain is an indication of concession. Nevertheless, receiving more favourable new conditions than those practised by the market is not a prerequisite for the identification of concessions and therefore

forbearance. However, when a debtor is in financial difficulties, a change in conditions in line with what other debtors with a similar risk profile could get from the credit institution should qualify as a concession. This is also the case when debtors are embedded in public forbearance schemes that are offered by banks.

Borrowers may request modifications in the contractual conditions of their loans without facing or being about to face difficulties in meeting their financial commitments. Nevertheless, an assessment of the financial situation of a borrower should always be performed when changes in the contractual conditions are requested.

Figure 3

Illustration of forbearance in the context of the NPE definition



Sources and notes of the figure: All paragraphs refer to Annex V, Part 2, Regulation (EU) 680/2014

§ 157

- ✓ **1 year** since forbearance measures
- ✓ **No past-due amounts** following forbearance measures
- ✓ **Payments** of **amounts previously past-due** or written-off
- ✓ **No** other transaction **non-performing** (when non-performing status assessed on a debtor basis, para. 154-155)

§ 176

- ✓ Minimum **2 year** probation period since performing status
- ✓ **Regular payments** of **more than an insignificant** aggregate amount of interest/ principal over at least 1 year
- ✓ **No** other transaction **past due > 30 days**

Following paragraph 178 of Annex V of Commission Implementing Regulation (EU) No 680/2014, a forborne exposure can be performing or non-performing. When granting forbearance measures to performing exposures, banks should assess whether these measures lead to a need to reclassify the exposure as non-performing. However, granting forbearance measures to non-performing exposures

does not clear their non-performing status: the exposures should continue to be identified as non-performing for at least one year after the granting of the forbearance measures.

5.3.2 Classification of forborne exposures as non-performing

Unless there is evidence to the contrary, forborne exposures meeting any of the following criteria should be classified as non-performing in any case:

- they are supported by inadequate payment plans (either initial or subsequent payment plans, as applicable) which encompass, inter alia, a repeated failure to comply with the payment plan, changes to the payment plan to avoid breaches, or the payment plan's resting on expectations that are not supported by macroeconomic forecasts or by realistic assumptions on the repayment capability or willingness of the debtor;
- they include contract terms that delay the time for the regular repayment instalments on the transaction, in such a way that hinders its assessment for a proper classification, such as when grace periods of more than two years for the repayment of the principal are granted;
- they include de-recognised amounts that exceed the accumulated credit risk losses for non-performing exposures with a similar risk profile.

5.3.3 Cure/exit from non-performing status

In accordance with paragraph 176 of Annex V of the EBA ITS on supervisory reporting, forborne exposure can be performing or non-performing. Specific requirements in paragraph 157 for reclassifying non-performing forborne exposures comprise the completion of a "cure period" of one year from the date the forbearance measures were extended and a requirement for the debtor's behaviour to demonstrate that concerns regarding full repayment no longer exist. Institutions are required to perform a financial analysis of the debtor to establish the absence of such concerns. For the requirements set out in paragraph 157 to be met and for the financial analysis to dispel concerns regarding full repayment under the post-forbearance conditions, all of the following criteria should be satisfied:

1. the exposure is not considered as impaired or defaulted;
2. there is no past-due amount on the exposure;
3. the borrower has settled, by means of regular payments, an amount equivalent to all those previously past due (if there were past-due amounts at the date the forbearance measures were granted) or a total equal to the amount written off as part of the forbearance measures (if there was no past-due amount), or the borrower has otherwise demonstrated its ability to comply with the post-forbearance conditions.

The absence of any past-due amount in criterion 2 means that the exposure is current and that any accrued unpaid principal and interest instalments have been repaid. The past-due amounts and the written-off amounts referred to in criterion 3 are those existing – or not–- on the date the forbearance measures were granted.

The credit institution's policies for the reclassification of non-performing forborne exposures should specify practices for dispelling concerns regarding the borrower's ability to comply with the post-forbearance conditions. These policies should establish thresholds in terms of the payments made during the cure period referred to in condition 3 above. The supervisory expectation is that these policies define the borrower's ability to comply with post-forbearance conditions (to the extent that full repayment of the debt is likely) at least by demonstrating payments of a not--insignificant amount of principal. This should apply whether institutions do or do not use the repayment of amounts that were past-due or written off at the date of the forbearance measures to assess the lack of concerns regarding the debtor.

Additionally, where a debtor has other exposure(s) to a credit institution which are not the subject of a forbearance arrangement the institution should consider the performance (i.e. presence of arrears) of these exposures in its assessment of the borrower's ability to comply with post-forbearance conditions. The consideration of arrears does not change the level of application of non-performing status in accordance with paragraphs 154 or 155 of the EBA ITS on supervisory reporting, as applicable.

The existence of contract terms that extend the repayment period, such as grace periods for the principal, mean that the forborne exposure should remain classified as non-performing until the requirements in 1. to 3. above have been satisfied. As criterion 3 requires regular repayments to be made, the elapsing of the one-year "cure period" does not automatically lead to reclassification to performing unless regular payments have been made over the 12 months.

5.3.4 Identification as performing forborne

Once forborne exposures are classified as performing, either because they have met the conditions for being reclassified from the non-performing category or because the granting of forbearance measures did not lead to the classification of the exposure as non-performing, they will continue to be identified as forborne until all the following conditions have been met, in accordance with paragraph 176 of the EBA ITS on supervisory reporting:

1. an analysis of the financial condition of the debtor showed that the transactions no longer met the conditions to be considered as non-performing;
2. a minimum of two years has elapsed since the later of the date of the concession or the date of reclassification from non-performing;

3. the borrower has made regular payments of more than an insignificant aggregate amount of principal or interest during at least half of the probation period;

4. the borrower does not have any other transactions with amounts more than 30 days past due at the end of the probation period.

Once all the requirements above have been met, the elapsing of the two-year period should not automatically lead to a removal of the identification of the exposure as "forborne".

In practice, requirement 3 as referred to above, relating to the regular payment of more than an insignificant aggregate amount, should not be fulfilled with payment of interest only. The credit institution's policies for the identification of forborne exposures should require payments of both principal and interest.

The credit institution's policies for identifying forborne exposures should also specify practices for dispelling concerns regarding the debtor's financial difficulties. Otherwise, the exposure will remain classified as forborne. For this purpose, the entity's policies should require the borrower to have settled, by means of regular payments, an amount equal to all the amounts (principal and interest) that were previously past due or de-recognised at the time of the concession, or to otherwise demonstrate its ability to comply with the post-forbearance conditions under alternative objective criteria that imply a repayment of principal.

During the probation period, new forbearance measures granted to performing forborne exposures that have been reclassified out of the non-performing category will entail the reclassification of these transactions to the non-performing category. The same will apply when these exposures become more than 30 days past-due.

5.4 Further aspects of the non-performing definition

5.4.1 Consistent definition at the banking group level

Banks should ensure that the identification of NPEs is consistent at the entity and at the banking group levels, with a harmonised implementation of the definition in all subsidiaries and branches.

A uniform NPE definition at the group level may differ from local standards in different jurisdictions outside the EU.

- At the initial stage, banks should therefore clarify whether local NPE recognition standards are more lenient or stringent in comparison with the overarching group standards.
- Second, banks should evaluate to what extent more lenient or stringent local standards lead to artificially inflated or deflated NPE stocks.

- Third, artificially inflated or deflated NPE stocks with respect to local standards should be aligned at the group level via appropriate mapping between classifications.
- Finally, in the event that local standards for non-performing recognition requirements substantially diverge from the standards of Commission Implementing Regulation (EU) No 680/2014, banks will be recommended to provide reporting in both standards for internal risk control purposes.

A consistent application of the definition of non-performing is required on a solo and on a consolidated level.

Thus, a unique obligor could be a client of several institutions within a group. Banks are expected to ensure that if a unique non-retail customer is classified as non-performing in one of the group's institutions, this default status event is communicated ("propagated") and registered in all other members of the group at short notice.

To that end, a group of credit institutions should establish an IT system at group level that allows for the identification of each obligor in any credit institution of the group with a unique identifier and the reporting of every occurrence of a non-performing status for any obligor on a timely basis.

In some cases, the consistent identification of non-performing status might not be fully possible if consumer protection, bank secrecy or legislation prohibits the exchange of client data within a group. Furthermore, consistent identification might in some cases be limited if it is too burdensome for banks to verify the status of a customer in all legal entities and geographical locations within a banking group. In that case, and in keeping with the approach set out in paragraph 82 of the EBA Guidelines on the definition of default, banks may refrain from performing the check for consistency on condition that they are able to demonstrate that the effect of non-compliance is immaterial and provide evidence that there are no, or only a very limited number of, common clients between relevant entities within a group.

5.4.2 Groups of connected clients

Banks' policies should ensure consistent treatment of individual clients and groups of connected clients as defined in the CRR and the relevant Committee of European Banking Supervisors (CEBS) Guidelines[36], and a consistent assessment of the underlying legal relationships between legal entities across a group of connected clients. In view of possible contagion, banks should, whenever feasible, apply a group perspective when assessing the status of a debtor's exposure as non-performing, unless it is affected by isolated disputes that are unrelated to the solvency of the counterparty.

[36] Committee of European Banking Supervisors (CEBS) Guidelines on the implementation of the revised large exposure regime.

To apply a group perspective to clients, the banks should take the definition of Article 4(1)(39) of the CRR at least as a starting point. The main criteria are control and economic interconnection.

If a bank can provide reasonable evidence to differentiate a group member of a non-performing connection as performing, using the criteria of control and economic interconnectedness, then the bank can make such a distinction under the CRR and the applicable accounting standards.

Consistently with paragraphs 109(c) and 113 in the EBA Guidelines on default, credit institutions should keep a register of all classification criteria.

5.4.3 Obligor "pulling effect"

According to paragraph 155 of Annex V of Commission Implementing Regulation (EU) No 680/2014, if more than 20% of the exposures of one obligor are past due by more than 90 days, all other exposures to this obligor (on and off-balance sheet) should be considered as non-performing

5.4.4 Classification of the operation in its entirely

According to paragraph 148 of Annex V of Commission Implementing Regulation (EU) No 680/2014, exposures should be categorised as non-performing for their entire amount. Thus, a given exposure cannot be classified partly as performing and partly as non-performing.

5.5 Links between regulatory and accounting definitions

5.5.1 Prudential definition of "default" (CRR)

Articles 127 and 178 of the CRR define default for the purposes of the standardised and internal ratings-based (IRB) approaches respectively.

The following table shows important gaps between the CRR default definition and the NPE definition (for the purpose of supervisory reporting under the EBA ITS). Practice shows that some institutions have tried to align their implementation of the default definition with the NPE definition in order to streamline processes and foster the convergence of the two definitions, also in light of the recent regulatory developments regarding the definition of default.

Table 3

Important gaps between CRR default and NPE definitions

Gap between default definition and NPE definition	Description
Pulling effect	According to paragraph 155 of Annex V, Part 2, of the EBA ITS on supervisory reporting, if 20% of the exposure to one debtor is more than 90 days past due, all exposures to that customer shall be considered non-performing.
Groups of connected customers	In the case of a group of debtors as different entities belonging to the same group, non-defaulted group members (paragraph 155 of Annex V, Part 2, of the EBA ITS) can be assessed as NPE, except when a debtor's exposure is recognised as a NPE because of disputes unrelated to its solvency.
Re-forbearance	In the case of performing forborne exposures within the two-year probation period, which were re-classified from NPE to performing exposures (paragraph 176(b) of Annex V, Part 2, of the EBA ITS), they are identified as NPE again if they become more than 30 days past due or if another forbearance measure is granted ("re-forbearance").
Exit from NPE and in particular cure period for forborne NPE cases	NPEs are subject to specific reclassification criteria in addition to the existing criteria for the discontinuation of the impairment or default statuses – for instance, for non-performing forborne exposures there is a one-year observation period in which the exposure has to be kept non-performing (paragraph 157 of Annex V, Part 2, of the EBA ITS).

According to Article 178(1)(b) of the CRR, for certain segments the past-due period may be extended by the competent authorities from 90 days to 180 days. However, the option to recognise defaults only after 180 days past due for some portfolios has been disregarded in the Regulation (EU) 2016/445 of the ECB[37] which became effective in October 2016. Article 4 of the Regulation requires a uniform application of the 90-day period.

5.5.2 Accounting definition of impaired

Exposures that have been found impaired in accordance with the applicable accounting framework should always be considered as non-performing exposures. Exposures with "collective allowances for incurred but not reported losses" for which no loss event has been identified in specific assets should not be considered as non-performing exposures.

Impaired and defaulted exposures are mandatorily to be considered as NPEs. Both the CRR and IFRS distinguish between breach of agreed payment obligations (past-due payments) and the economic triggers related to unlikeliness to pay.

Table 4

Definitions of defaulted and impaired

Default of an obligor (Article 178 CRR)	Credit-impaired financial assets (IFRS 9 Appendix A, which goes back to IAS 39)
1(b) the obligor is more than 90 days past due on any material credit obligation to the institution, the parent undertaking or any of its subsidiaries	(b) a breach of contract, such as a default or past due event. [A financial asset is past due when a counterparty has failed to make a payment when contractually due.]
2(a) for overdrafts, days past due commence once an obligor has breached an advised limit, has been advised a limit smaller than the current outstanding amount, or has drawn credit without authorisation and the underlying amount is material;	[Remark: Overdrafts not specifically mentioned in IFRS 9, but included in the more general trigger "breach of contract"]

Table 2 in chapter 5.2.2 shows a comparison of the CRR and IFRS definitions, where the loss events in IAS 39 were ordered to match the default events listed in

[37] Regulation (EU) 2016/445 of the European Central Bank of 14 March 2016 on the exercise of options and discretions available in Union law (ECB/2016/4).

the CRR. Not all default events listed in the CRR automatically represent loss events under this accounting standard.

Outlook: IFRS 9

IFRS 9 defines credit-impaired financial assets in Appendix A. This definition is not only relevant for financial assets, but also for financial guarantees and loan commitments. The definition in IFRS 9 does not differ significantly from the definition under IAS 39.

Under IFRS 9, a transfer to Stage 2 and thus lifetime credit losses is generally expected to be recognised before the financial instrument becomes past due or other borrower-specific default events are observed. Banks' credit risk analyses should take into account that the determinants of credit losses very often begin to deteriorate a considerable time (months or, in some cases, years) before any objective evidence of delinquency appears (BCBS Guidance on CRAECL (2015), paragraph A19, and EBA draft Guidelines on ECL, paragraph 102).

For the purpose of assessing the significance of an increase in credit risk, banks should thus have a clear policy including well-developed criteria to distinguish increases in credit risk for different types of lending exposures (such criteria should be disclosed). The credit risk assessment should focus exclusively on the default risk, without considering the effects of credit risk mitigants such as collateral or guarantees (BCBS Guidance on CRAECL (2015), paragraph A22, and EBA draft Guidelines on ECL, paragraph 105).

Under IFRS 9, credit impairment leads to a transfer from Stage 2 to Stage 3. However, both Stages 2 and 3 require provisions for lifetime losses and lifetime losses grow continuously as creditworthiness decreases, depending on the level of collateralisation. It is expected that as of the date IFRS9 comes into force at least all Stage 3 exposures will fall into the scope of this NPL guidance.

5.6 Supervisory reporting and public disclosures

On disclosures, banks should consider the EBA ITS supervisory reporting requirements as established in Commission Implementing Regulation (EU) No 680/2014 as a benchmark. These were supported by the European Securities and Markets Authority (ESMA), which encouraged financial institutions to use the definitions of NPE and forbearance in Commission Implementing Regulation (EU) No 680/2014 for their financial statement disclosures and to explain the relationship between NPLs, defaulted and impaired loans applied in the institution.[38]

[38] See ESMA PS and ESMA, Review of Accounting practices, Comparability of IFRS Financial Statements of Financial Institutions in Europe (2013)

Therefore, banks are strongly encouraged to use the definitions of NPE and forbearance (Annex V of Commission Implementing Regulation (EU) No 680/2014) in their public financial statement or, if not, to publish a reconciliation between their own definitions of impaired and modified financial assets and the definitions in Annex V of Commission Implementing Regulation (EU) No 680/2014. This reconciliation should comprise both a conceptual explanation of the differences and quantitative information on the effects of these conceptual differences.

For the sake of comparability and transparency, disclosure should therefore contain, in addition to the requirements of accounting standards (e.g. IFRS 7, which already covers data on portfolio quality and trigger events), the expectations as set out in Annex 7 of this guidance.

6 NPL impairment measurement and write-offs

6.1 Purpose and overview

Provisioning plays a crucial role in ensuring the safety and strength of banking systems and hence is a key focus of bank supervisors. Supervisory initiatives such as asset quality reviews (AQRs) and stress tests (STs) have further highlighted the need for consistent provisioning methodology and adequate provisioning levels across banks.

This chapter has three principal objectives, namely to foster (within the context of relevant and applicable accounting standards):

1. adequate measurement of impairment provisions across all loan portfolios through sound and robust provisioning methodologies (sections 6.2, 6.3 and 6.4);
2. timely recognition of loan losses within the context of relevant and applicable accounting standards (with a focus on IAS/IFRS accounting standards) and timely write-offs (sections 6.5 and 6.6);
3. enhanced procedures including significant improvement to the number and granularity of asset quality and credit risk control disclosures (sections 6.7 and 6.8).

The guidance in this chapter is consistent with the international recommendation and principles on sound credit risk assessment published by the Basel Committee (BCBS 2006, further updated in 2015 to incorporate considerations on the expected credit losses model to be introduced by IFRS 9). It summarises what are considered as best practices, taking into account the historical experience in different jurisdictions and/or practices already utilised by supervisors to assess credit riskiness (for instance, the SSM AQR methodology).

Role of provisioning adequacy

The SSM's role in the assessment of credit risk and capital adequacy requires supervisors to make decisions on whether banks' provisions are adequate and timely.

There has been international expert support (from the International Monetary Fund (IMF)[39]) for supervisors to play an effective role in loan loss provisioning and an active role by supervisors has been recommended by the BCBS.

The Basel Committee highlights supervisory responsibilities in assessing banks' processes for credit risk and asset valuation, as well as in ensuring sufficient loan loss provisions, particularly from the standpoint of the assessment of credit risk exposures and capital adequacy. This is reflected in the Basel Committee's guidelines, including:

- "Guidance on credit risk and accounting for expected credit losses" (2015);
- "Core Principles for Effective Banking Supervision" (2012), and Basel II Pillar 2 (2006).

If supervisors determine that provisions are inadequate for prudential purposes, they have the responsibility to request banks to reassess and increase provisioning levels for prudential purposes.

As part of this process, supervisors need to provide guidance, as well as information as to their expectations, regarding accounting for credit losses in order to ensure an adequate level of consistency across supervised entities, particularly where the applicable accounting standards are principle-based.

While this guidance cannot provide specific accounting requirements, it describes best practices on provisioning principles and methodology for non-performing loans that may be applied within existing accounting frameworks in order to fulfil supervisory expectations.[40]

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[39] IMF working paper entitled: Supervisory Roles in Loan Loss Provisioning in Countries Implementing IFRS, September 2014.

[40] Article 74 of Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, requires banks to have "adequate internal control mechanisms, including sound administration and accounting procedures,...that are consistent with and promote sound and effective risk management".
Article 79 of Directive 2013/36/EU requires competent authorities to ensure that "(b) institutions have internal methodologies that enable them to assess the credit risk of exposures to individual obligors (…) and credit risk at the portfolio level"' and "(c) the ongoing administration and monitoring of the various risk-bearing portfolios and exposures of institutions, including for identifying and managing problem credits and for making adequate value adjustments and provisions, is operated through effective systems"'. Article 88(1)(b) of Directive 2013/36/EU also includes the principle that "'the management body must ensure the integrity of the accounting and financial reporting systems, including financial and operational controls and compliance with the law and relevant standards. In accordance with Article 97(1) of Directive 2013/36/EU, competent authorities must review the arrangements, strategies, processes and mechanisms implemented by institutions to comply with that Directive and Regulation (EU) No 575/2013. In this regard, Article 104(1) of Directive 2013/36/EU enumerates the minimum powers that competent authorities must have, including the power 'to require the reinforcement of the arrangements, processes, mechanisms and strategies implemented in accordance with Articles 73 and 74' (Article 104(1)(b)), 'to require institutions to apply a specific provisioning policy or treatment of assets in terms of own funds requirements' (Article 104(1)(d))".

Scope of this chapter

IAS 39, and in the future IFRS 9, lays down the principles for impairment recognition. This is the standard applied by SSM banks, which prepare their consolidated and/or individual financial statements in accordance with IFRS as endorsed by the EU.

IFRS 9 financial instruments, which will replace IAS 39 for the accounting periods beginning on or after 1 January 2018, require among other things the measurement of impairment loss provisions based on an expected credit loss ("ECL") accounting model rather than on an incurred loss accounting model as under IAS 39.

Although not formally in force at the time of publication, given the relevance of IFRS 9 to the subject matter outlined in this chapter, reference to both IAS 39 and IFRS 9 is included below. For the avoidance of doubt, all reference to IFRS 9 is proposed in the context of Stage 3 only. References to IFRS 9 are included in this guidance (in separate boxes) to highlight to the reader what changes may occur under this new standard.

The principles identified in this guidance should be adapted and taken into account also by banks applying national generally accepted accounting principles (n-GAAPs).

6.2 Individual estimation of provisions

6.2.1 Individually significant and non-significant exposures

Under IAS 39, the amount of the loss allowance is measured as the difference between the asset's carrying amount and the estimated future cash flows discounted at the financial asset's original effective interest rate. This process requires, at least, the following choices:

1. determine when an individual allowance (i.e. for an individual financial asset/debtor) or an allowance determined collectively (i.e. for a group of financial assets with similar credit risk characteristics) should be made;

2. determine the methods and parameters for the estimation of the loss allowance (individual and collective assessment).

With reference to point 1., IAS 39 provides a number of criteria based on a materiality concept and the application of expert judgement. Any application of specific quantitative thresholds should be determined by the banks and properly disclosed.

According to this accounting standard, exposures which are individually significant should be subject to individual assessment of impairment, while for exposures that are not individually significant the impairment assessment and loss allowance estimation can be performed either on an individual or collective basis. For loans that

are individually significant but are not individually impaired, a collective assessment should be performed.

The scope given by IAS 39 for expert judgement should not lead to any type of arbitrage in the impairment estimation process. Banks are expected to clearly define, in their internal policy, the criteria to make these decisions according to the principles presented in this guidance.

With reference to point 2), banks should define the internal criteria to follow when determining the methodology for impairment assessment and inputs for the calculation of the loss allowance, taking into account the principles established in this guidance.

For individual estimations, the expected future cash flows will depend on the type of scenario that banks apply, i.e. a going concern approach or a gone concern approach (please refer to section 6.2.4 for further details).

For collective estimations of impairment the critical aspects that should be considered by the banks are related to i) grouping the NPLs in homogenous clusters (based on similar credit risk characteristic), ii) calculation of the historical loss experience for the identified group, i.e. how to reliably determine the risk parameters (i.e. LGD, cure rate, etc.), and iii) how to calibrate the impairment estimation according to the principles established by IAS 39. The classification of a loan as an NPL is objective evidence that the loan should be assessed for impairment. The amount of impairment to be recognised should be estimated either individually or collectively.

6.2.2 Criteria for individual estimation of provisions

Banks' policies should include the criteria to identify exposures subject to individual estimation of loss allowances. Such criteria should take the following factors into account.

- Individual significance of the exposure. As stated in IAS 39, provisions for individually significant exposures should be assessed on an individual basis. Institutions are responsible for defining the relevant thresholds (absolute and relative thresholds), taking into account, among other factors, the possible impact of the exposure in the financial statements and the concentration level (individual and sectorial). Provisions for exposures that are not individually assessed should be collectively estimated.

- Other cases where exposures do not share common risk characteristics or for which no relevant historical data that enable a collective analysis (e.g. not enough volume to create a group of exposures, portfolios not material, low default portfolios) are available.

The criteria used to identify exposures subject to an individual estimation should be documented in the internal policy of the entity and should be applied consistently. This documentation should be available to the supervisor on request.

IFRS 9

The criteria for classification in "Stage 3" of IFRS 9 are similar to the criteria for classification as "impaired" under IAS 39. For financial assets considered credit-impaired ("Stage 3") the impairment allowance covers that specific loan and its estimation could be done either on an individual basis or a collective basis.

6.2.3 General methodology for individual estimation of allowances

When conducting a specific assessment for impairment, banks are expected to apply a true and fair view to the estimation of both the future cash flows and the collateral valuations based on the best practice included in this guidance.

The estimated recoverable amount should correspond to the amount calculated under the following method[41]:

- the present value of estimated future cash flows (excluding future losses not incurred) discounted at the financial asset's original effective interest rate;
- the estimation of the recoverable amount of a collateralised exposure reflects the cash flows that may result from the liquidation of the collateral.

Given the relevance of the collateral valuation in the impairment provision calculation process, the banks should follow the general principles included in chapter 7 of this guidance.

Banks should maintain in the credit file of the transactions the documentation needed so that a third party can replicate the individual estimations of accumulated credit losses made over time. This documentation should include, inter alia, information on the scenario used to estimate the cash flows it is expected to collect (going concern vs. gone concern scenario), the method used to determine cash flows (either a detailed cash-flow analysis or other more simplified methods such as the "steady state approach" or the "two-step cash-flow approach"), their amount and timing as well as the effective interest rate used for discounting cash-flows (please refer to section 6.2.4 for further details).

The entity should establish and document the periodic procedures for checking the reliability and consistency of its individual estimations over the course of the various

[41] As a practical expedient, IAS 39, paragraphs 63 and AG84, allows measurement using the fair value price.

stages of the credit-risk control cycle. In particular, this periodic check of its individual estimates should be conducted by means of back-testing exercises whereby the entity assesses their accuracy by comparing them a posteriori with the actual losses observed on transactions.

Banks should amend their individual estimation methods when the periodic back-testing exercises recurrently reveal significant differences between the estimated losses and the actual loss experience. In such cases, the credit institution should draw up a plan specifying the measures it needs to take to correct the differences or non-compliances, accompanied by an implementation timetable. The entity's internal audit department should monitor the implementation of this plan, verifying that the corrective measures are adopted and that the timetable is followed correctly.

IFRS 9

Forecasts of future economic conditions when calculating expected credit losses should be considered.

The lifetime expected losses should be estimated based on the probability-weighted present value of the difference between:

1. the contractual cash flows that are due to an entity under the contract and
2. the cash flows that the holder expects to receive.

6.2.4 Estimating future cash flows

The bank should to estimate future cash flows, which are usually the result of an active workout of the loan and/or the sale of collateral. They may also come from the sale of the collateralised or uncollateralised loan if this reflects the NPL strategy, e.g. sale to a specialised collection agency or fund. In that case, the expected cash flow should reflect a realisable market price.

The estimation of future cash-flow allowances should be done under the following two broad approaches[42].

- Under a "going concern" scenario, the operating cash flows of the debtor or the "effective" guarantor, in line with the principles of the CRR, continue and can be used to repay the financial debt to all creditors. In addition, collateral may be exercised to the extent it does not influence operating cash flows (e.g. premises pledged as collateral cannot be exercised without impacting cash flows). This could be the case if:

[42] AQR Manual, page 122.

- future operating cash flows of the debtor are material and can be reliably estimated;
- there is only limited collateralisation of the exposure.

- Under a “gone concern” scenario, the collateral is exercised and the operating cash flows of the debtor cease. This could be the case if:
  - The exposure has been past due for a long period. There is a rebuttable presumption that the allowance should be estimated under gone concern criteria when arrears are longer than 18 months.
  - Future operating cash flows of the debtor are estimated to be low or negative.
  - Exposure is significantly collateralised, and this collateral is central to cash-flow generation.
  - Application of the going concern scenario would impact materially and negatively the amount recoverable by the institution.
  - There is a significant degree of uncertainty surrounding the estimation of the future cash flows. This would be the case if the earnings before interest, taxes, depreciation and amortisation (EBITDA) of the two previous years had been negative, or if the business plans of the previous years had been flawed (due to material discrepancies in the back-testing).
  - Insufficient information is available to perform a going concern analysis (if the gone concern approach is considered inadequate, the bank should assess whether the inclusion of those exposures in the collective assessment of impairment would be reasonable).

Estimation of operating cash flows under a going concern scenario

The following aspects should be taken into account.

- Since the allowance estimation is based on the assumption of operating cash flows of the debtor, or the guarantor, updated and reliable information on cash flows and the business plan is a requisite for such estimation.
- Future operating cash flows should be based on the financial statements of the debtor. When projections assume a growth rate, a steady or declining growth rate over a maximum growth period of 3-5 years should be used, and afterwards steady cash flows. The growth rate should be based on the financial statements of the debtor or on a robust and implementable business restructuring plan, taking into account the resulting changes in the structure of the business (e.g. due to divestments or the discontinuation of unprofitable business lines). (Re)-investments that are needed to preserve cash flows should be considered, as well as any foreseeable future cash-flow changes

(e.g. if a patent or a long-term contract expires). When planning future cash flows, the bank should also consider the future default or re-default risk based on an appropriate expected credit standing (e.g. by applying empirically derived cumulative default tables). Deviations from this approach in individual cases require specific justification.

- Estimation of amounts obtained under the realisation of a financial guarantee alone will be admissible when there is reliable information as to the creditworthiness of the guarantor and the legal effectiveness of the guarantee.
- Appropriate and reliable adjustments may be applied when data for the previous year do not yet lead to a sustainable level of cash flows due to financial accounting choices/methodology (on a best-efforts basis according to the available information). This is the case, for example, when reversals of provisions improve results[43] (AQR).
- When the recoverability of the exposure relies on the realisation of the disposal of some assets by the debtor, the selling price should reflect the estimated future cash flows that may result from the sale of the assets less the estimated costs associated with the disposal. Allocation of cash flows to claims should be made according to their seniority ranking.
- The length of the projection should be restricted to the length of the reliable cash-flow projection (projections over a period of five years are only admissible in exceptional circumstances).[44]

A detailed cash-flow analysis requires the entities to conduct a thorough analysis of the debtor’s financial situation, the available cash flows, financial indicators, business plans, forecasts etc. to determine the most realistic future cash flows to be collected. In application of the simplicity principle, it may be appropriate to use more simplified methods such as the “steady state approach” or the “two-step cash-flow approach”.

Business plans and cash-flow projections should be scrutinised with great attention by banks, taking into consideration worst case or more adverse scenario hypotheses. The availability of financial forecasts is generally a key point for assessing exposures. It is typically when forward-looking statements are not available or reliable (and this is a frequent situation) that less sophisticated methods should be applied and possibly combined.

Banks should document in their policies when it is appropriate to apply each method for individual estimation and to use the selected method consistently over time.

The “steady state approach” is a method to approximate future recurrent cash-flows to be generated by the debtor by means of applying multiples to adjusted EBITDA.

[43] AQR Manual, page 133

[44] Use of observable market price as an alternative to the going concern approach: institutions may derive the present value from cash flows using an observable market price taking into account the maturity of the exposure and ensure the applicability of the market price to the exposure by applying specific criteria. Market prices only are an acceptable “practical expedient” to estimate a recoverable amount when they are observable on active markets.

For instance, the 2014 AQR exercise provided a benchmark multiple of 6 (general case), 10 (utilities) or 12 (infrastructures). The cash flows should then be allocated to each exposure. One of the critical issues in this approach is the estimation of an adjusted EBITDA (neutralising some non-recurring items and adjusted for capital expenditure and one-off effects).

In the “two-step cash-flow approach”, the present value of the cash flows to be allocated to each exposure requires a period-by-period analysis followed by an estimation of the terminal value (TV) which should be calculated:

- either by assessing a sustainable one-period at the end of the projection and applying a multiple as stated in the steady cash-flow approach; or
- by assuming a “gone concern approach”.

A detailed cash-flow analysis with multi-period cash-flow projections can be widely used but appears more suitable if the financing transaction is targeted at income-generating business or asset-based lending transactions. Acceptable businesses for the multi-period cash-flow projection approach are, for instance:

- shipping with long-term charter (i.e. greater than the time period in the cash-flow projection) and/or collateral to be sold after the end of the cash-flow projection period;
- commercial real estate where real estate is forecasted to be sold after the end of the cash-flow projection period;
- project finance where generated income is pledged and/or collateral is forecasted to be sold;
- real estate where residential or commercial property is forecasted to be sold;
- income-producing business where the service of loans is based on the sale of one or more commercial properties.

Estimation of the recoverable amount of the collateral under the gone concern approach

The recoverable amount should correspond to the present value of estimated future cash flows that may result from sale of collateral less the cost of obtaining and selling the collateral. Please refer to chapter 7 – Collateral valuation for immoveable property.

6.3 Collective estimation of provisions

6.3.1 General principles related with internal methodologies

Collective estimation should be applied to calculate the provisions for non-performing loans for which an individual estimation is not performed. The future cash flows of a group of exposures that are collectively evaluated for impairment are calculated based on the estimated contractual cash flows, the exposures in the group and the historical loss experience for exposures with credit risk characteristics similar to those in the group.

Internal methodologies for the estimation of collective provisions should comply with the general requirements established in section 6.2 of this guidance.

When performing the collective assessment of impairment, banks should take into account the following principles.

Internal governance

A bank´s management body should be responsible for ensuring that the bank has appropriate methods and procedures for estimating allowances on a collective basis in order to comply with the internal risk control practices, accounting standards and supervisory/prudential requirements.

Integration in risk control

Methods and procedures for estimating allowances should be integrated in the entity´s credit risk control system and form part of its processes.

Simplicity and effectiveness

The methods and processes for monitoring and updating estimates of allowances and provisions should ensure at all times that the results obtained are based on a robust method for the estimation of the provisioning levels which can be justified based on empirical data. In the absence of sufficient empirical data, they should ensure that the assumptions are representative of a true and fair view based on reasonable information. This includes aligning the assumed estimations to actual (historical observed) experience and assessing the appropriate level of collateral discount for both forced and voluntary liquidations.

Robust policies and procedures should be in place to validate the accuracy and consistency of the collective allowance estimations on an on-going basis.

The expectation is that banks will “back-test” the allowance estimations for every significant portfolio, at least once a year. The methods for estimating allowances and provisions should be comprehensible to users and, in any event, ensure that the results obtained do not contradict the underlying economic and financial logic of the various risk factors. In addition, the bank should periodically analyse the sensitivity to changes in the methods, assumptions, factors and parameters used to estimate allowances and provisions.

IFRS 9

IFRS 9 requirement to incorporate forward-looking information in the collective estimation of allowances.

This principle is also included in BCSB – 2015 “Guidance on credit risk and accounting for expected credit losses”’ as follows:

Principle 6: A bank’s use of experienced credit judgment, especially in the robust consideration of reasonable and supportable forward-looking information, including macroeconomic factors, is essential to the assessment and measurement of expected credit losses.

This principle corresponds to Principle 6 under the EBA draft Guidelines on credit institutions’ credit risk management practices and accounting for expected credit losses.

6.3.2 Methodology for collective estimation of allowances

Criteria for grouping exposures for collective assessment

Groups of loans created to estimate allowances on a collective basis should be sufficiently granular to ensure that grouped exposures have shared credit risk characteristics, so that banks can reasonably assess changes in credit risk and their impact on the estimate of allowances. It is expected that, when collective allowances relate to unimpaired exposures, such as when the allowances are raised to cover incurred but not reported losses, separate portfolios will be constituted for performing exposures and for NPE.

An internal policy of the entity should establish the methodology for grouping exposures to assess credit risk. The following indicators may, inter alia, be considered when grouping exposures:

- instrument type;
- product terms and conditions;

- industry/market segment;
- collateralisation (considering both the loan-to-value and the type of collateral);
- geographical localisation;
- past due status;
- forbearance measures applied;
- borrower employment status.

Loans should not be grouped in such a way that an increase in the credit risk of a particular exposure is masked by the performance of the group as a whole. Grouping of lending exposures should be re-evaluated and exposures re-segmented if a reassessment of credit risk (e.g. linked to the emergence of a new credit risk driver) suggests that a permanent adjustment is needed. If the bank is not able to re-segment its exposures in a timely manner, a temporary adjustment may be used[45].

Given the importance of the ageing of arrears and the number of payments in arrears to determine the level of impairment, it is essential to guarantee that the IT systems are capable of providing these data in an accurate manner.

Parameters included in the collective estimation of allowances

Allowances estimated on a collective basis should be based on historical loss experience for assets with credit risk characteristics similar to those in the group. They should be adjusted on the basis of current observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and the effects of conditions in the historical period that do not exist currently should be removed.

In applying these requirements, the following should be taken into account:

- when estimating parameters for collective provisioning models, the levels of management judgement should be minimal, with parameter estimations for collective provisioning models being based on time series data;
- any parameters should be reflective of the credit characteristics of each appropriately stratified loan pool (especially when banks estimates loss given default (LGD), cure rates and re-default rates);
- the assessment of financial/economic conditions should take into account all relevant factors that have a bearing on loss rates, including (but not limited to) macroeconomic variables (e.g. GDP, unemployment, property prices), changes in relevant laws (e.g. bankruptcy code), institutional factors (e.g. duration of

[45] BCBS Guidance on credit risk and accounting for expected credit losses, paragraphs 49-51.

court procedures) and changes in international, national and local economic and business conditions;

- for collateralised exposures, the collective estimations should be consistent with the criteria established for estimating the recoverable amount of collateral as referred to in chapter 7 – Collateral valuation for immoveable property;
- the impact arising from changes in the risk portfolio as a whole, including increases in the volume of impaired exposures, restructurings and the existence of/increase in the level of credit concentrations;
- any possible impact deriving from changes in lending policies and procedures, extension of forbearance measures, write-off policy and recovery practices.

Banks should be able to demonstrate on the basis of specific evidence that model parameters for any given group of collectively assessed assets have been updated to reflect recent changes in financial/economic conditions.

Furthermore, where applicable, the following should be taken into account with respect to specific model parameters applied to each portfolio:

- the approach for calculating cure rates and cured loans should be defined in line with section 5.3 of this guidance;
- LGD parameters should reflect estimated recoveries from collateral whose key determinants are demonstrably in line with empirical evidence as outlined in chapter 7 of this guidance;
- banks should create a full data set for the calculation of key parameters assumed within collective provisioning methodologies;
- the methodology and assumptions used for the impairment estimations should be reviewed on an annual basis to reduce any differences between loss estimates and actual loss experience. In addition, the methodology and assumptions should be appropriately documented and approved by the management body.

IFRS 9

The principles of IFRS 9 are more aligned to prudential calculation of expected losses from the perspective that IFRS 9 is based on expected losses and, although necessarily methods for accounting and prudential estimation differ in some elements, certain key elements of the internal model systems for both should be aligned to the maximum extent possible:

- both systems should be based, on the one hand, on estimated inflows into transactions in default (such as estimates of PDs) and, on the other, on estimates of recovery flows in the event of default (by considering possible

outcomes of recovery processes and estimates of the losses produced in each of them).

- all other key elements of the systems, related to their practical implementation, should be aligned. These other elements include, inter alia, the definition of homogeneous risk groups and the databases and controls used.

6.4 Other aspects related to NPL impairment measurement

6.4.1 Impairment allowances for financial guarantee contracts and loan commitments given

Off-balance-sheet items such as financial guarantees and loan commitments represent potential additional credit losses. Financial guarantees and loan commitments may be designated as at fair value under IAS 39; financial guarantees may also be accounted for according to IFRS 4.

To measure[46] the most likely drawn exposure, reliable cash-flow forecasts or estimated credit conversion factors should be used. This reliability should be confirmed through the existence of robust historical data and back-testing procedures demonstrating adherence of past estimations to the incurred credit losses. As an alternative, the credit conversion factors stipulated in Article 166(10) of the CRR should be applied following the classifications in Annex I of the CRR on the nominal value of the commitment.

IFRS 9

For financial guarantees not accounted for at fair value, when estimating lifetime expected credit losses, specifically Stage 3 for undrawn loan commitments or financial guarantees given, the bank should:

1. estimate the expected portion of the loan commitment that will be drawn down;

2. calculate the present value of the difference between the contractual cash flows if that expectation is verified and the cash flows that the entity effectively expects to receive.

Probability-weighted estimations as required by IFRS 9 should be taken into account. Regarding the financial guarantee contracts, the expected credit losses will correspond to the difference between the probability-weighted expected payments to

[46] AQR Manual page 125.

reimburse the holder for a credit loss less any amounts that the bank expects to receive from the holder, the debtor or any other party.

6.4.2 Recognition and reversal of impairment losses

Any additional impairment to be recognised corresponds to the difference between the carrying amount, i.e. the net book value after any impairment recognition or write-off, and the estimated recoverable amount.

Reversal of impairment should occur when there is objective evidence that the impairment is lower than previously computed with the available information at that time. This may be assumed in the following cases (non-exhaustive list):

- the debtor has repaid a higher fraction of the outstanding debt than anticipated at the time of the previous impairment;
- the debtor has provided additional collateral since the previous impairment;
- cash flows have improved;
- at least one of the loss events that led to the impairment tests has been reversed;
- any other event that has led to an improvement in the recoverable amount from this debtor is taken into consideration.

Regarding foreclosed assets, in alignment with section 7.5 ("Valuation of foreclosed assets"), once foreclosed assets have been classified as held for sale any impairment loss is based on the difference between the adjusted carrying amount of the asset and fair value less the cost of selling it. Banks should develop internal policies that clearly define the main methodologies and assumptions used to determine both the fair value of foreclosed assets and the cost of selling them. These methodologies should take into account, at least, a market price discount (haircut) according to the liquidity of each type of asset and any "cost to sell". If the open market value reflects the condition after future completion work, the discount should also incorporate completion costs. Banks are expected to develop their own assumptions based on robust and empirical evidence.

6.5 NPL write-offs

International commentators such as the IMF have underscored the need for banking supervisors to have a general policy requiring timely write-off of uncollectable loans and assist banks in formulating sound write-off criteria[47].

[47] BCBS 2006 paper entitled "Sound Credit Risk Assessment and Valuation for Loans", page 13.

In the same context, the IMF has also noted[48] that supervisors fulfil their roles of assessing credit risk and enforcing the capital adequacy of banks, in part, by ensuring sufficient and timely loan loss provisioning, and has highlighted the many benefits of timely write-off of uncollectable loans. In addition, the BCBS 2015 paper entitled “Sound Credit Risk Assessment and Valuation” states that uncollectability is to be recognised in the appropriate period through allowances or write-offs[49].

The timely recognition of provisions and the timely write-off of uncollectable/unrecoverable loans is a key supervisory focus as it serves to strengthen banks' balance sheets and enables them to (re)focus on their core business, most notably lending to the economy. When loans are deemed uncollectable/unrecoverable, they should be written off in a timely manner.

The importance of write-offs is implied in IFRS 7, which requires disclosure of write-off criteria. IFRS 9 provides a high-level definition of write-off.

Under IFRS 9, the gross carrying amount of a financial asset is reduced when there is no reasonable expectation of recovery. A write-off constitutes a de-recognition event. Write-off can relate to a financial asset in its entirety, or to a portion of it.

Therefore, the gross carrying amount of a financial asset is reduced by the amount of the write-off.

An entity is required to disclose the contractual amount of financial assets written off that are still subject to enforcement activity.

An entity should write off a financial asset or part of a financial asset in the period in which the loan or part of the loan is considered unrecoverable.

For the avoidance of doubt, a write-off can take place before legal actions against the borrower to recover the debt have been concluded in full. A write-off does not involve the bank forfeiting the legal right to recover the debt; a bank’s decision to forfeit the legal claim on the debt is called “debt forgiveness”.

Once an amount has been written off from the balance sheet, it is not possible to write-back/reverse that adjustment, in opposition to impairment provisions, which can be retaken through the statement of profit and loss where there are changes in the estimation. Write-offs should not be written-back and if cash or other assets are eventually collected these collections would be directly recognised as income in the statement of profit or loss.

[48] See IMF working paper entitled “Supervisory roles in Loan Loss provisioning in Countries implementing IFRS” (https://www.imf.org/external/pubs/ft/wp/2014/wp14170.pdf).

[49] BCBS 2015 paper entitled “Guidance on credit risk and accounting for expected credit losses”, page 21.

6.6 Timeliness of provisioning and write-off

The timely recognition of provisions and timely write-off of unrecoverable loans is a key supervisory focus as it serves to strengthen the balance sheet of banks and enables them to (re)focus on their core business, most notably lending to the economy.

All banks should include in their internal policies clear guidance on the timeliness of provisions and write-offs. Especially for exposures or parts of exposures that are not covered by collateral, banks should determine suitable maximum periods for full provisioning and write-off. For parts of exposures covered by collateral, the establishment of a minimum provisioning level depending on the type of collateral is deemed supervisory best practice. Empirical evidence and conservatism should be applied when calibrating the described provisioning and write-off periods referred to above. When assessing the recoverability of NPLs and in determining internal NPL write-off approaches, banks should pay particular attention to the cohorts shown below as they may represent higher levels of permanent unrecoverability; this should be assessed case-by-case.

- Exposures with prolonged arrears: Different thresholds may be adequate for different portfolios. Banks should assess the recoverability of exposures classified as non-performing due to arrears for a prolonged length of time. If, following this assessment, an exposure or part of an exposure is deemed as unrecoverable, it should be written off in a timely manner.
- Exposures under insolvency procedure: where the collateralisation of the exposure is low, legal expenses often absorb a significant portion of the proceeds from the bankruptcy procedure and therefore estimated recoveries are expected to be very low.
- A partial write-off may be warranted where there is reasonable financial evidence on the credit file to demonstrate an inability on the borrower’s behalf to repay the full amount of the monies owing i.e. a significant level of debt overhang which cannot be reasonably demonstrated to be recoverable following implementation of a forbearance treatment and/or the execution of collateral.

6.7 Provisioning and write-off procedures

6.7.1 Policies

Provisioning

As per the BCBS guidance on credit risk, a bank´s management body should be responsible for ensuring that the bank has appropriate credit risk practices, including an effective system of internal control, to consistently determine adequate allowances[50].

Furthermore, entities should adopt, document and adhere to sound methodologies that address policies, procedures and controls for assessing and measuring allowances on non-performing loans[51].

- These methodologies should be reviewed regularly.
- Methodologies should clearly document the key terms, judgements, assumptions and estimates related to the assessment and measurement of allowances for non-performing loans (e.g. migration rates, loss events, costs to be incurred in order to enforce the collateral)[52]. They should be based on robust analysis and be supported by objective evidence.
- Clear guidance on the timeliness of provisions should be established by types of exposure (see section 6.6).
- Banks should adopt and adhere to written policies and procedures detailing the credit risk systems and controls used in their credit risk methodologies[53].
- The management judgements, estimates, considered assumptions and related sensitivity analysis should be subject to appropriate disclosures.

Banks should, as a matter of best practice, back-test their impairment estimations against their actual losses on a regular basis. Supervisory expectation is that this would occur at a minimum every 6 months.

In addition, banks should, when considering the write-back/reduction of existing provisions, ensure that the revised estimates and assumptions reflect current economic conditions and the current view of the expected economic outlook.

Banks should also consider the contractual obligation of expected cash flows before considering including them in discounted cash flows.

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[50] BCBS Guidance on credit risk and accounting for expected credit losses, principle 1.

[51] BCBS Guidance on credit risk and accounting for expected credit losses, principle 2.

[52] BCBS Guidance on credit risk and accounting for expected credit losses, paragraph 29.

[53] BCBS Guidance on credit risk and accounting for expected credit losses, paragraph 31.

IFRS 9

Amount of allowances, both for individual and collective estimations, will be affected by the assumption related with future events and macroeconomic factors, such as the estimations of GDP, unemployment rate and collateral value. Those estimations should consider all the relevant and supportable information, including forward looking information. Entities should document all key assumptions, including explanations for their adequacy.

Write-off

Entities are responsible for defining their NPL write-off policy based on internal and external factors. Supervisors would expect that each bank, after taking into consideration the principle of proportionality, would have a clearly defined NPL write-off policy in place approved by the management body. This should be available to the supervisor upon request.

Banks should ensure that measures are undertaken internally to avoid any arbitrage of provision coverage calculation due to NPL write-off activities. In particular, write-offs should take place when justified by the uncollectability of the exposure in accordance with the internal write-off policy, as opposed to exposures being written off only for the purpose of reaching a given level of gross NPLs or maintaining a given level of coverage ratio.

6.7.2 Internal documentation

Provisioning

Banks should maintain internal supporting documentation, which may be made available for review by the supervisory authority upon request. It should include:

- the criteria used to identify loans subject to an individual assessment;
- rules applied when grouping exposures with similar credit risk characteristics, whether significant or not, including supporting evidence that the exposures have similar characteristics;
- detailed information regarding the inputs, calculations and outputs in support of each of the categories of assumptions made in relation to each group of loans;
- rationale applied to determine the considered assumptions in the impairment calculation;

- results of testing of the assumptions against actual loss experience;
- policies and procedures which set out how the bank sets, monitors and assesses the considered assumptions;
- findings and outcomes of collective allowances;
- supporting documentation for any factors considered that produce an impact on the historical loss data;
- detailed information on the experienced judgment applied to adjust observable data for a group of financial assets to reflect current circumstances[54].

Write-offs

Banks should internally document and disclose their considered write-off policy, including the indicators used to assess the expectations on recovery. Additionally, detailed information on those financial assets that have been written-off but are still subject to enforcement activity should be provided.

In the interests of full transparency of write-offs, banks should maintain detailed records of all NPL write-offs on a portfolio-level basis and this information should be readily available to supervisors upon request.

IT Database considerations

Banks should have databases complying with the following requirements.

- Depth and breadth, in that they cover all the significant risk factors. This should allow, inter alia, exposures to be grouped together in terms of common factors, such as the institutional sector to which the borrower belongs, the purpose of the transaction and the geographical location of the borrower, so as to enable aggregate analysis allowing identification of the entity’s exposure to these significant risk factors.
- Accuracy, integrity, reliability and timeliness of data.
- Consistency. The data should be based on common sources of information and uniform definitions of the concepts used for credit-risk control.
- Traceability, such that the source of information can be identified.

The entity’s internal control functions (such as the internal audit or risk control departments) should verify that its databases comply at all times with the characteristics required by the internal policies, and in particular with the requirements set out above.

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[54] IAS 39, paragraph 62.

Banks should have procedures to ensure that the information collected in their databases is integrated with management reporting, so as to make sure that reports and other documentation (whether recurrent or ad hoc) of relevance to decision-making at the various management levels, including that of the management body, are based on timely, complete and consistent information.

Banks should establish and document the periodic procedures for comparing the reliability and consistency of their database transaction classifications and the results of their estimated allowances and provisions over the course of the various stages of the credit-risk control cycle. They should periodically compare their allowance and provision estimates by means of back-testing whereby they assess the accuracy of said estimates by comparing them a posteriori with the effective real losses observed on transactions.

The methods and assumptions used for estimating allowances and provisions should be reviewed regularly to reduce any differences between loss estimates and the actual loss experience. The entity's management body should be responsible for deciding if significant changes are to be made to the methods used to estimate allowances and provisions.

As an additional support, the entity should periodically undertake:

- analyses of sensitivity to changes in the methods, assumptions, factors and parameters used to estimate allowances and provisions;
- comparison and benchmarking exercises, using all the significant information available both internally and externally.

6.8 Supervisory reporting and public disclosures

Supervisory reporting

Upon request by supervisors, banks should, at a minimum, be able to provide them with data regarding the models they use to calculate impairment allowances for NPLs on a collective basis as per table 7 in Annex 7.

Public disclosure

To give users of financial statements a better understanding of loan portfolio quality and credit risk control practices, banks are expected to disclose the detailed set of quantitative and qualitative disclosures as outlined in Annex 7.

7 Collateral valuation for immovable property

7.1 Purpose and overview

Findings of supervisory activities including the Comprehensive Assessment/AQR but also onsite inspections have highlighted deficiencies in the approaches employed by banks in relation to the completeness and accuracy of immovable property valuation.

In the past, banks have often failed to obtain periodic financial information from borrowers or updated real estate valuations in order to assess the quality of loans on their balance sheets and the adequacy of collateral. Consequently, the banks failed to recognise early warning signs that asset quality was declining, which resulted in an understatement of balance sheet loan loss provisions.

Scope of chapter

This chapter sets out supervisory expectations and provides best guidance regarding the policies, procedures and disclosures which banks should adopt when valuing immovable property held as collateral for NPLs.

Under the SSM, banks are expected to adhere to the principles presented in this chapter and incorporate these principles into their policies, procedures and controls.

For the purposes of the guidance set out in this chapter, all types of immoveable property collateral are eligible regardless of CRR eligibility.

Articles 208 and 229 of Regulation (EU) No 575/2013 apply.[55]

This chapter begins by outlining general governance expectations (section 7.2) covering aspects of policies, procedure, monitoring and controls as well as expectations with regard to appraisers. It then provides guidance on the frequency of valuations (section 7.3) and on valuation methodology (section 7.4). Finally, it also touches on the valuation of foreclosed assets (section 7.5).

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[55] In particular, paragraph 3 of Article 208 states: “The following requirements on monitoring of property values and on property valuation shall be met: (a) institutions monitor the value of the property on a frequent basis and at a minimum once every year for commercial immovable property and once every three years for residential property. Institutions carry out more frequent monitoring where the market is subject to significant changes in conditions; (b) the property valuation is reviewed when information available to institutions indicates that the value of the property may have declined materially relative to general market prices and that review is carried out by an appraiser who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process. For loans exceeding EUR 3 million or 5 % of the own funds of an institution, the property valuation shall be reviewed by such appraiser at least every three years.”

7.2 Governance, procedures and controls

7.2.1 General policies and procedures

The bank should have written policies and procedures in place, approved by the management body and complying with the criteria established herein, governing the valuation of immovable property collateral.

The policy and procedures documents should have defined owners with responsibility for reviewing them and ensuring that material changes are submitted to the management body for approval.

Banks' written collateral valuation policies and procedures should be reviewed at least on an annual basis. Banks should ensure that any knowledge gaps are identified during the review process and remediation plans are implemented in a timely manner to close any such gaps.

Policies and procedures should be fully aligned with the bank's risk appetite statement (RAS).

7.2.2 Monitoring and controls

Banks are expected to monitor and review the valuations performed by appraisers on a regular basis as set out in this chapter.

Banks should develop and implement a robust internal quality assurance policy and procedures for challenging valuations completed internally and externally. This process may have different forms depending on banks' size and business model but the general principles are:

- the quality assurance process should be carried out by a risk control unit that is independent of the loan processing, loan monitoring and underwriting process;
- the independence of the external appraiser selection process should be tested on a regular basis as part of the quality assurance process;
- an appropriate similar sample of internal and external valuations should be compared against market observations on a regular basis;
- back-testing of both internal and external collateral valuations should be carried out on a regular basis;
- the quality assurance process should be based on an appropriate sample size.

Additionally, the internal audit department should regularly review the consistency and quality of the immovable property valuation policies and procedures, the independence of the appraiser selection process and the appropriateness of the valuations carried out by both external and internal appraisers.

Banks should ensure adequate diversification among the valuations assigned to appraisers. After two sequential updated individual valuations (as defined in the next section) of the same immovable property, the appraiser should rotate (either to a different internal valuer or to a different external appraisal provider).

While sections 7.2.1 and 7.2.2 above relate to collateral securing NPLs, supervisors would also consider these sections to represent best practice for the governance, monitoring and control of performing exposures.

7.2.3 Individual versus indexed valuations

Individual valuations

For the purposes of this guidance, banks should use at a minimum the following procedures to update the valuation of immoveable property collateral as follows:

- Banks should monitor the value of immovable property collateral on a frequent basis and at a minimum as prescribed in Article 208(3) of Regulation (EU) No 575/2013.
- Individual property valuations (including updated individual property valuations) are defined as property-specific appraisals, which are performed by an appraiser on a specific property basis and are not based on indexation or any other automated process. Individual property valuations should be performed in line with the expectations of this chapter.

Indexed valuations

Valuations derived from indexation or any other automated processes are defined as indexed valuations and do not constitute a revaluation or an individual property valuation. However, they may be used to update the valuation for non-performing loans of less than 300,000 euro in gross value, which are secured by immovable property collateral provided that the collateral to be valued is susceptible to measurement by such methods.

The minimum requirements of Article 208(3) of the CRR will continue to apply notwithstanding the existence of the stated exception threshold.

Furthermore, the threshold for indexation does not supersede any national jurisdictional requirement specifying a more conservative threshold requirement for individual valuations.

The indices used to carry out this indexation may be internal or external as long as they are:

- Reviewed regularly and the results of this review are documented and are readily available. The review cycle and governance requirements should be clearly defined in a management body approved policy document.
- Sufficiently granular and the methodology should be adequate and appropriate for the asset class in question.
- Based on a sufficient time series of observed empirical evidence (actual property transactions).

7.2.4 Appraisers

All valuations (including updated valuations) should be performed by independent qualified appraisers, internal or external, who possess the necessary qualifications, ability and experience to execute a valuation, as provided for in Article 208(3)(b) of Regulation (EU) No 575/2013.

Banks should have a properly approved panel of independent and qualified appraisers, internal or external, based on the criteria below. They should assess appraisers' performance on an on-going basis and decide whether an appraiser may remain in the panel, or not.

Banks should ensure that external appraisers have an appropriate level of professional indemnity insurance and should review this insurance on an annual basis to ensure that it is adequate and valid.

Banks should ensure that all appraisers and their first grade relatives, both internal and external, meet the requirements of independence as follows:

- appraiser is not involved in the loan processing, loan decision and credit underwriting process;
- appraiser is not guided or influenced by the debtor's creditworthiness;
- appraiser does not have an actual or potential, current or prospective conflict of interest regarding the result of the valuation;
- appraiser does not have an interest in the property;
- appraiser is not a connected person to either the buyer or the seller of the property;
- appraiser provides an impartial, clear, transparent and objective valuation report;
- appraiser should not receive a fee linked to the result of the valuation.

A qualified appraiser should:

- be professionally competent and have at least the minimum educational level that meets any national requirements to carry out such valuations;
- have appropriate technical skills and experience to perform the assignment;
- be familiar with and be able to demonstrate ability to comply with any laws, regulations and real estate valuation standards that apply to the appraiser and the assignment;
- have the necessary knowledge of the subject of the valuation, the real estate market in which it would trade and the purpose of the valuation.

A panel of appraisers should contain expertise in various areas of the property sector appropriate to the lending business of the bank and the location of lending.

7.3 Frequency of valuations

For the purposes of this guidance, banks should use the procedures described below to review and monitor the valuation of immoveable property collateral.

Notwithstanding the provisions of section 7.2, banks should update individual valuations for the collateral of all exposures on a frequent basis and at a minimum every year for commercial immovable property and every three years for residential immoveable property.

The valuation of the immovable property collateral should be updated on an individual basis at the time the loan is classified as a non-performing exposure and at least annually while it continues to be classified as such. This applies to all loans classified as non-performing as per chapter 5 of this guidance. The only exception to this individual updated valuation requirement is that below specific exposure thresholds (see section 7.2.3) updated individual valuations may be carried out by indexation provided that the collateral to be valued is susceptible to be measured with such methods.

For properties with an updated individual valuation that has taken place within the past 12 months (in line with all applicable principles and requirements as set out in this chapter), the property value may be indexed up to the period of the impairment review.

Banks should carry out more frequent valuations where the market is subject to significant negative changes and/or where there are signs of significant decline in the value of the individual collateral.

Therefore, banks should define criteria in their collateral valuation policies and procedures for determining that a significant decline in collateral value has taken place. These will include quantitative thresholds for each type of collateral established, based on the observed empirical data and any relevant qualitative bank experience, bearing in mind relevant factors such as market price trends or the opinion of independent appraisers.

Banks should have appropriate IT processes and systems in place to flag out-dated valuations and to trigger valuation reports.

7.4 Valuation methodology

7.4.1 General approach

Banks should have defined collateral valuation approaches per collateral product type which are adequate and appropriate for the asset class in question.

All immovable property collateral should be valued on the basis of market value or mortgage lending value as allowable under Article 229 of the CRR. Market value is the estimated amount for which an asset or liability should be exchanged on the valuation date between a willing buyer and a willing seller in an arm's length transaction after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

Overall valuations based only on the discounted replacement cost should not be used.

For income-generating immovable properties a market comparable or discounted cash-flow approach can be used.

Immovable property collateral should be valued, adhering to European and international standards[56]. National standards can also be accepted if they follow similar principles.

7.4.2 Expected future cash flows

In accordance with the principles in chapter 6 on NPL measurement, individual estimations of provision allowances by discounting future cash flows can be carried out using two broad approaches:

- "going concern" scenario, where the operating cash flows of the debtor continue and can be used to repay the financial debt and collateral may be exercised to the extent it does not influence operating cash flows;
- "gone concern" scenario, where the operating cash flows of the debtor cease and collateral is exercised.

In a going concern scenario, since estimation of allowance is based on the assumption of operating cash flows of the debtor including cash flows being received from the collateral, updated and reliable information on cash flows is a requisite for

[56] These include the European Valuation Standards EVS-2016 (Blue Book) and the Royal Institute of Chartered Surveyors (RICS) standards.

such estimation. Please refer to chapter 6, NPL Measurement, which includes further reference to a going concern scenario.

7.4.3 Gone concern approach

In a gone concern scenario, the future sale proceeds from collateral execution should be adjusted taking into account the appropriate liquidation costs and market price discount to the open market value (OMV).

Liquidation/selling costs

Liquidation costs are defined as the cash outflows incurred during collateral execution and the sales process and include:

- all applicable legal costs;
- selling costs, taxes and other expenses;
- any additional maintenance costs to be incurred by the bank in relation to the repossession and disposal of the collateral;
- any cash inflows up to the date of liquidation.

In addition to the above liquidation costs, a market price discount, if appropriate, should be applied to the updated valuation as outlined below.

The property price (i.e. OMV) at the time of liquidation should take into account current and expected market conditions.

Time-to-sale considerations based on the underlying national legal framework on the disposal of mortgaged properties should also be included if applicable, especially when the legal procedures are lengthy.

The execution of collateral can include both consensual and non-consensual (forced) liquidation strategies.

The extent/size of the liquidation costs as outlined above should be directly related to the manner of collateral execution i.e. whether it is consensual or non-consensual.

Market price discount

Market price discounts applied to the property price (OMV at the time of liquidation) or to fair values derived from fair value models are relevant for the following economic reason: empirical evidence and practical experience show that there is a negative correlation between the frequency of defaults and the value of collateral. Furthermore, market liquidity tends to decline if banks need to realise collateral in numerous instances and in times of high default rates they often face capital

pressure to speed up the liquidation of collateral even if they need to sell at unfavourable prices. Using a discount is not an expression of an arbitrary conservative bias, but reflects the economic reality of forecasting cash flows. The market price discount should thus reflect the liquidity of the market and the liquidation strategy. It should not reflect fire sale conditions unless the anticipated liquidation strategy actually involves a fire sale.

Supervisors expect banks to apply adequate market price discounts for the purposes of IAS 39 and IFRS 9, for the calculation of regulatory capital and for risk control purposes. A market price discount can be close to zero for highly liquid and non-distressed collateral types, which are not affected by any significant correlation risks. A minimum discount of 10% should be applied if the collateral is sold by auction.

All banks are expected to develop their own liquidation cost and market price discount assumptions based on observed empirical evidence. If insufficient empirical evidence is available, discount assumptions should be sufficiently conservative and based on, at a minimum, liquidity, passage of time, and the quality/ageing of the appraisal. If a bank faces the situation of a frozen real estate market and only a small number of properties have been sold or the sales history has to be considered as not sufficient, a more conservative market price discount should apply.

Example for the calculation of expected future cash flows

A worked example outlining how the liquidation/selling costs and market price discount are applied is included below. It also shows that in addition to the market price discount and liquidation cost, other aspects such as maintenance cost and discounting (especially for long time-to-sale) can significantly impact the net present value of the collateral.

Example

Market price discount of 10% applies

Time to liquidation/disposal: 5 years

Selling costs (including taxes and other expenses): 10%

Maintenance costs: 5%

Effective interest rate: 5%

	T=0	T=1	T=2	T=3	T=4	T=5
Gross value of loan	**€300**					
Open market valuation of collateral						**€200**
Market price discount						-€20
Selling costs						-€18
Maintenance costs		-€10	-€10	-€10	-€10	-€10
Expected future cash flows		-€10	-€10	-€10	-€10	€152
Present value of collateral	**€84**					
Amount of impairment	**€216**					

Further considerations on estimating cash flows from property collateral liquidation

In estimating cash flows from property collateral liquidation, banks should use adequate and realistic assumptions. In addition, credit institutions should pay attention to the requirements of valuing cash flows under IFRS 13 on fair value measurements. In particular, financial institutions should comply with the following requirements.

- Determine the assumed time of disposal taking into account current and expected market conditions as well as the underlying national legal framework regarding the disposal of mortgaged properties.
- Ensure that the property price used to determine the estimated market value of property collateral at the point of liquidation is not more optimistic than projections produced by international organisations, and therefore does not result in an improvement on the current market conditions.
- Ensure that income from property collateral is not assumed to increase from the current levels unless there is an existing contractual arrangement for such increase. Moreover, current income from property should be adjusted when calculating the cash flows in order to reflect the expected economic conditions. For example, it may not be appropriate to project a flat rental income in a recessionary environment where vacant properties are increasing, putting downward pressure on rent levels.
- A “hold” strategy on immovable property is not acceptable. A hold strategy is defined as holding the asset at above market value assuming that the asset will be sold after the market recovers.

When using the value of collateral in assessing the recoverable amount of the exposure, the following at least should be documented:

- how the value was determined, including the use of appraisals, valuation assumptions, and calculations;
- the supporting rationale for adjustments to appraised values, if any;
- the determination of selling costs, if applicable;
- the expertise and independence of the appraiser;
- the assumed timeline to recover.

When the observable market price is used to assess the recoverable amount of the exposure, the amount, source and date of the observable market price should also be documented on file.

Banks should be able to substantiate the assumptions used by providing to the competent authority, if requested, details on the property market value, the market price discount, legal and selling expenses applied, and the term used for the time to

liquidation. Banks should be able to fully justify their assumptions, both qualitatively and quantitatively, and explain the drivers of their expectations, taking past and current experience into account.

Back-testing

Banks should demonstrate via sound back-testing that the assumptions used are reasonable and grounded in observed experience. In this context, banks should regularly back-test their valuation history (last valuation before the object was classified as a NPL) vs. their sales history (net sales price of collateral). Depending on the size and business model of the bank, it should differentiate between object types (e.g. single family home, apartment, warehouse), valuation models/approaches, type of sale (voluntary/forced) and regions for their back-testing process. The back-testing results should be used to determine discounts on collateral valuations supporting exposures remaining on the balance sheet. Alternatively, banks using the A-IRB approach can use secured LGDs to determine discounts.

IT database requirements in respect of collateral

Banks should have databases of transactions to enable the proper assessment, monitoring and control of credit risk and the preparation of reports and other timely and comprehensive documentation, both for management and to inform third parties or respond to requests from supervisors. In particular, databases should comply with the following requirements:

- depth and breadth, in that they cover all the significant risk factors;
- accuracy, integrity, reliability and timeliness of data;
- consistency – they should be based on common sources of information and uniform definitions of the concepts used for credit-risk control;
- traceability, such that the source of information can be identified.

These databases should include all the relevant information on properties and other collateral for the banks’ transactions and on the links between collateral and specific transactions.

7.5 Valuation of foreclosed assets[57]

Banks are strongly encouraged to classify foreclosed real estate assets as non-current assets held for sale under IFRS 5[58]. This accounting treatment implies that

[57] The definition of foreclosed assets applied in the context of this guidance is provided in Annex 1.

the management should approve an individual plan to sell the asset within a short timeframe (normally one year) and that an active sales policy should be pursued (IFRS 5.8); thus, it favours recoveries.

Given this premise, foreclosed assets received should be valued at the lower of:

- the amount of the financial assets applied, treating the asset foreclosed or received in payment of debt as collateral;
- the fair value of the repossessed asset, less selling costs.

When fair value is not obtained by reference to an active market but is based on a valuation technique (either level 2 or level 3), it may be necessary to make some adjustments as a result of the following factors:

- The condition or location of the assets. Risk and uncertainties regarding the asset should be incorporated in the fair value estimation.
- The volume or level of activity of the markets for these assets. The previous experience of the entity in the realisations and the differences between the valuation technique and the final amount obtained in the realisation should be incorporated. Assumptions made in order to measure this adjustment may be documented, and should be available to the supervisor on request. Illiquidity discounts may be considered.

In rare cases, banks acquire buildings still under construction and decide to complete construction before selling the building. In such cases, the bank should demonstrate the merits of such a strategy and the cost should not exceed the fair value less costs to complete and sell the asset considering adequate illiquidity discounts as described above. Foreclosures of property are merely a consequence of granting loans which later defaulted. Therefore, such foreclosures are not an expression of a property investment business strategy as defined in IAS 40. Nor are difficulties encountered by banks in selling foreclosed property evidence of such an investment strategy. Banks are therefore strongly discouraged from applying IAS 40 in such cases and encouraged to apply IFRS 5 as indicated at the beginning of this section.

Long maintenance periods for foreclosed assets are evidence of difficulties in disposing of them, for example due to the illiquidity of the market. Therefore, when a foreclosed asset has exceeded the average holding period of similar assets, for which active sale policies are in place, banks should revise the illiquidity discount applied in the valuation process mentioned above, and increase it accordingly. In these circumstances, the bank should refrain from recognising write-backs/reversals of existing accumulated impairment on the asset as its prolonged presence on the balance sheet provides evidence that the bank is unable to sell the assets at an increased valuation.

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[58] Under the IFRS framework, there are a number of approaches to value foreclosed assets (IAS 2, IAS 16, IAS 40 and IFRS 5). However, supervisors strongly encourage banks to use IFRS 5 for the reasons outlined above.

The frequency of valuation of foreclosed assets and the applicable procedures are aligned to the treatment of immoveable property as set out in section 7.3 and 7.2.2.

7.6 Supervisory reporting and public disclosures

Annex 7 sets out supervisory expectations on public disclosures relating to collateral.

Annex 1 Glossary

Abbreviation/Term	Definition	Reference
AMC (asset management company)	A special-purpose vehicle for cleansing bank balance sheets. A credit institution can transfer non-performing assets (NPA) to an AMC, subject to certain requirements and conditions being met. AMCs are often referred to as "bad banks".	
AQR (asset quality review)	Assessment conducted by supervisors to enhance the transparency of bank exposures, including the adequacy of asset and collateral valuation and related provisions.	ECB 2014 and 2015 AQR results
BCBS (Basel Committee on Banking Supervision)	Committee of the Bank for International Settlements which provides a forum for regular cooperation on banking supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking supervision worldwide. The most important regulatory frameworks are known as Basel II and Basel III. Representatives of central banks and supervisory authorities from different countries are members of the BCBS.	https://www.bis.org/bcbs
CRR (Capital Requirements Regulation)	Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.Text with European Economic area relevance.	Official text of CRR
CRD IV (Capital Requirements Directive)	Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC. Text with EEA relevance.	Official text of CRD IV
Cure rate	The percentage of loans that previously presented arrears and, post restructuring, present no arrears.	
Denounced loans	Denounced loan, as used, for example, in the Greek NPL context, means that the loan contract has been terminated by the lender and such termination has been notified to the borrower.	
EBITDA (earnings before interest, taxes, depreciation and amortisation)	Useful metric for comparing the income of companies with different capital structures. Companies with significant fixed assets, such as manufacturing companies, or companies which incur large depreciation charges or which have significant intangible assets which result in large amortisation charges, can easily be compared. It is also a useful measure for a company's creditors as it shows the income available for interest payments.	
EL (expected loss)	"Expected loss" or "EL" means the ratio of the amount expected to be lost on an exposure from a potential default of a counterparty or dilution over a one-year period to the amount outstanding at default. "Exposure" means an asset or off-balance-sheet item. "Loss" means economic loss, including material discount effects, and material direct and indirect costs associated with collecting on the instrument.	Regulation (EU) 575/2013 Art 5(3)
EWI (early warning indicators)	Quantitative or qualitative indicators, based on asset quality, capital, liquidity, profitability, market and macroeconomic metrics. In the context of the risk control framework, an institution can use progressive metrics ("traffic light approach") or EWI to inform the institution's management that a stress situation ("red triggers") could potentially be reached.	
Foreclosed assets	For the purposes of this guidance, foreclosed assets are defined as assets held on the balance sheet of a credit institution obtained by taking possession of collateral, or by calling on similar credit enhancements. Those assets can be obtained through judicial procedures ("foreclosed" in the strict sense), through bilateral agreement with the debtor (swap or sale) or other types of collateral transfer from debtor to creditor. Foreclosed assets comprise both financial assets and non-financial assets. Foreclosed assets include all collateral obtained irrespective of their classification for accounting purposes (e.g. including assets for own use and for sale).	
FTE (full time equivalent/employee)	A unit obtained by comparing an employee's average number of hours worked to the average number of hours of a full-time worker. A full-time person is therefore counted as one FTE, while a part-time worker gets a score in proportion to the hours he or she works.	http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Full-time_equivalent_(FTE)
GDP (gross domestic product)	The standard measure of the value of final goods and services produced by a country during a period minus the value of imports.	https://data.oecd.org/gdp/gross-domestic-product-gdp.htm
IAS (International Accounting Standards)	Rules set by the International Accounting Standards Board (IASB) – an independent body of international accounting experts. The main purpose of the standards is to promote the quality, transparency and comparability – at an international level, too – of financial statements drawn up by various enterprises or by one enterprise for various periods. Publicly traded enterprises domiciled in the EU are required by Regulation (EU) 1606/2002 to prepare	http://www.ifrs.org/Pages/default.aspx

	consolidated financial statements in accordance with International Accounting Standards. As the IASB is an international association under private law, its standards cannot be immediately legally binding. Each standard has to undergo a recognition procedure in order to become legally binding at EU level or in other countries. Prior to 1 April 2001, the body was called the International Accounting Standards Committee (IASC) and the rules that it issued were called International Accounting Standards (IAS). These rules are still valid and still bear the same name. Any rules published after this date are called International Financial Reporting Standards (IFRS).	
ICAAP (internal capital adequacy assessment process)	Strategies and processes to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital that banks consider adequate to cover the nature and level of the risks to which they are or might be exposed. These strategies and processes are subject to regular internal review to ensure that they remain comprehensive and proportionate to the nature, scale and complexity of the activities of the institution concerned. See also Article 73 of Directive 2013/36/EU, which requires institutions to have in place a sound, effective and comprehensive ICAAP.	Official text of Directive 2013/36/EU – CRD IV
IFRS (International Financial Reporting Standards)	Set of international accounting standards stating how particular types of transactions and other events should be reported in financial statements. See also IAS (International Accounting Standards) above.	http://www.ifrs.org/Pages/default.aspx
IMF (International Monetary Fund)	International organisation of which the primary purpose is to ensure the stability of the international monetary system – the system of exchange rates and international payments that enables countries (and their citizens) to transact with each other. The Fund's mandate was updated in 2012 to include all macroeconomic and financial sector issues that have a bearing on global stability. It has 186 member countries.	http://www.imf.org
KPI (key performance indicator)	Indicators through which a bank's management or supervisor can assess the performance of the institution.	
LGD (loss given default)	"Loss given default" or "LGD" means the ratio of the loss on an exposure due to the default of a counterparty to the amount outstanding at default. "Loss" means economic loss, including material discount effects, and material direct and indirect costs associated with collecting on the instrument.	Regulation (EU) 575/2013, Art 4(1)(55) and Art 5(2)
LLP (loan loss provision)	Reduction in the carrying amount of an asset to reflect its decrease in creditworthiness.	
LTV (loan to value)	Ratio used in the context of mortgage lending expressing the value of a loan compared to the appraised value of the underlying real estate.	
MIS (management information systems)	Risk-management information systems to gather and report relevant data at a business and bank-wide level.	See BIS Principles for effective risk data aggregation and risk reporting
NPA (non-performing assets)	NPEs plus foreclosed assets	
NPE (non-performing exposures)	Exposures (loans, debt securities, off-balance-sheet items) other than held for trading that satisfy either or both of the following criteria: (a) material exposures which are more than 90 days past-due; (b) the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past-due amount or the number of days past due. Non-performing exposures include the defaulted and impaired exposures. The total NPE is given by the sum of non-performing loans, non-performing debt securities and non-performing off-balance-sheet items. See also EBA Implementing Technical Standard (ITS) on Supervisory Reporting (Forbearance and non-performing exposures).	EBA Implementing Technical Standard (ITS) on Supervisory Reporting (Forbearance and non-performing exposures)
NPL (non-performing loans)	Loans other than held for trading that satisfy either or both of the following criteria: (a) material loans which are more than 90 days past-due; (b) the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past-due amount or of the number of days past due. Non-performing loans include defaulted and impaired loans. NPLs are part of NPEs. See also EBA Implementing Technical Standard (ITS) on Supervisory Reporting (Forbearance and non-performing exposures). However, it should be noted that this Guidance document generally refers to "NPLs" as this is an established term in daily interactions between banks and supervisors. In technical terms, the guidance addresses all Non-Performing Exposures (NPEs) following the EBA definition, as well as foreclosed assets. In parts it also touches on performing exposures with an elevated risk of turning non-performing, such as watch-list exposures and performing forborne exposures.	EBA Implementing Technical Standard (ITS) on Supervisory Reporting (Forbearance and non-performing exposures)
NPL WUs (Workout Units)	Dedicated and separate organisational units within the bank solely occupied with NPL workout processes; those units can also comprise early arrears activities (i.e. exposures not yet classified as NPLs) or foreclosed assets.	
NPV (net present value)	The nominal amount outstanding minus the sum of all future debt-service obligations (interest and principal) on existing debt discounted at an interest rate different from the contracted rate.	
OMV (open market valuation)	The price at which an asset would trade in a competitive auction setting. OMV is used interchangeably with Market Value.	https://www.ivsc.org/
PD (probability of default)	"Probability of default" or "PD" means the probability of default of a counterparty over a one-year period.	Regulation (EU) 575/2013, Art 4(1)(54)

PE (performing exposure)	Exposures not covered by the NPE criteria as defined above.	
RAF (risk appetite framework)	The overall approach, including policies, processes, controls, and systems through which risk appetite is established, communicated and monitored. It includes a risk appetite statement, risk limits, and an outline of the roles and responsibilities of those overseeing the implementation and monitoring of the RAF. The RAF should consider material risks to the financial institution, as well as to the institution's reputation vis-à-vis policyholders, depositors, investors and customers. The RAF aligns with the institution's strategy.	Financial Stability Board publication Principles for An Effective Risk Appetite Framework
RAS (risk appetite statement)	The articulation in written form of the aggregate level and types of risk that a financial institution is willing to accept, or to avoid, in order to achieve its business objectives. It includes qualitative statements as well as quantitative measures expressed relative to earnings, capital, risk measures, liquidity and other relevant measures as appropriate. It should also address more difficult to quantify risks such as reputation and conduct risks as well as money laundering and unethical practices.	Financial Stability Board publication Principles for An Effective Risk Appetite Framework
Recovery plan	Document drafted by credit institutions and investment firms containing the measures to be taken in order to restore their financial position following a significant deterioration of their financial situation, as required by the new Union-wide framework for crisis prevention, crisis management and resolution.	See Article 5(10) of Directive 2014/59/EU and EBA final draft Regulatory Technical Standards on the content of recovery plans.
SI (significant institution)	In Single Supervisory Mechanism (SSM) terms, a significant institution is a bank to which such importance is attached that it is directly overseen by the European Central Bank (ECB). The following are considered "significant": the three largest banks in a participating member state, banks in receipt of direct European Financial Stability Facility/European Stability Mechanism (EFSF/ESM) assistance and banks with total assets in excess of €30 billion or 20% of national gross domestic product (with a balance sheet total of at least €5 billion). In exceptional cases, the ECB can declare significant a bank operating across national borders. Overall, as of 1 January 2016 the ECB has defined around 129 banks, which together have banking assets amounting to over 80% of the total assets on the aggregated balance sheets of all supervised credit institutions, as significant. Direct supervision is microprudential, i.e. institution-specific, in nature, while "systemically important financial institutions" are subject to macroprudential, i.e. system-specific, oversight.	https://www.bankingsupervision.europa.eu
SSM (Single Supervisory Mechanism)	The pillar of the EU banking union that is responsible for banking supervision. It comprises the ECB and the national supervisory authorities of the participating countries. Its main aims are to: (i) ensure the safety and soundness of the European banking system, (ii) increase financial integration and stability, (iii) ensure consistent supervision.	https://www.bankingsupervision.europa.eu
ST (stress test)	Stress test exercises conducted by supervisory authorities in order to provide supervisors, banks and other market participants with a common analytical framework to consistently compare and assess the resilience of banks to economic shocks.	EBA 2016 EU-wide stress test exercise ECB 2016 stress test – press release
Texas ratio	The Texas ratio is generally calculated by dividing the gross value of a bank's non-performing assets by the sum of its tangible common equity capital and loan loss reserves.	
UTP (unlikeliness to pay)	See article 178(3) of Regulation (EU) 575/2013 for the elements to be taken as indications of unlikeliness to pay.	http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R0575
Watch-list exposures	Exposures that have displayed characteristics of a recent increase in credit risk which are subject to enhanced monitoring and review by the bank.	

Annex 2
Sample of NPL segmentation criteria in retail

1. Natural or legal person
    (a) Retail client
    (b) Sole trader
    (c) Small businesses and professionals
    (d) Small and medium-sized enterprises (SMEs) (overlap with corporates)
2. Arrears bucket/days past due (the higher the level of arrears the narrower the range of possible solutions)
    (a) Early arrears (>1 dpd and ≤90 dpd)
    (b) Late arrears of (>90 dpd and <180dpd)
    (c) Debt Recovery Unit > 180dpd, including also legal cases (borrowers for which legal actions have taken place or are in progress)
3. Re-restructured cases (restructured loans with arrears, indicative of persistence of repayment problems and/or failure of restructuring solution offered)
    (a) Number of previous restructurings
4. Exposure balance
    (a) High value
    (b) Low value
    (c) Multiple exposures
5. Level of risk (based on bank's assessment / behaviour scoring / internal behaviour data / transaction history / credit rating). Clients with better payment histories are more likely to respond positively to restructuring offers.
    (a) very high
    (b) high
    (c) medium
    (d) low

6. Based on borrower's behaviour
   (a) seasonal repayments
   (b) cooperative vs. non cooperative (customers unwilling to cooperate should be sent to debt recoveries)
      (i) number of promises kept/not kept
      (ii) number of unsuccessful call attempts
      (iii) date of last successful contact
7. Purpose of credit facility (by product)
   (a) principal private residence loan
   (b) secondary home/holiday home loan
   (c) investment property loan/buy to let loan
   (d) personal loan
   (e) overdraft account
   (f) leased asset
   (g) credit card
   (h) sole traders, micro businesses, small and medium-sized business loan
      (i) for the setup of the business: premises; infrastructure, machinery; renovations
      (ii) working capital
8. Loan currency (euro, Swiss franc, dollar etc.)
9. Loan interest rate (interest rate reduction consideration for loans burdened by high interest rates, if possible)
10. Customer outlook (borrower's age, health, employment type and history, employment prospects, professional skills, industry).
11. Country of residence/incorporation
   (a) residents
   (b) non-residents
12. Location of the underlying collateral
   (a) rural vs. urban
   (b) prime location, city centre, outskirts etc.

13. Type of underlying collateral
    - (a) land
        - (i) building plot
        - (ii) agriculture land
    - (b) building
        - (i) house
        - (ii) shop
        - (iii) factory
14. Based on the LTV
    - (a) For low LTV loans, sale of underlying collateral may be the preferred option, as opposed to high LTV loans
15. Hardship cases (health problems, separations, divorce)
16. Borrower’s affordability assessment
    - (a) can afford loan repayment vs. cannot afford
    - (b) income less expenditure vs. reasonable living expenses vs. loan instalment
17. Borrower’s viability (e.g. viable vs. non-viable borrower)

Annex 3
Benchmark for NPL monitoring metrics

Banks should establish a robust set of metrics to measure progress in the implementation of their strategy for non-performing loans and foreclosed assets. The table below provides an indicative and not exhaustive list of such metrics and includes key elements described in section 3.5 of this guidance.

High-Level NPL Metrics	
NPE level and flows	NPE stock / Total volume of exposures
	NPE stock + foreclosed assets + performing forborne / Total volume of exposures + foreclosed assets
	Quarterly flow of NPEs (+/-) / Total NPE stock
	Quarterly flow from PE to NPE
	Quarterly flow from performing forborne to NPE
	Quarterly flow from NPE to PE
	Quarterly flow from NPE to performing forborne
	Quarterly flow from performing forborne to PE
	Quarterly flow from PE to performing forborne
Provisions	Quarterly increase in provision stock
	Quarterly level of provision write-backs
	Quarterly change in provision stock (+/-) / Total NPE Stock
	Accumulated total provisions / Total NPE Stock
	By cohort (e.g. number of years since NPL classification, secured/unsecured)
Loss budget	Total loss as a result of forbearance activity
	Total loss versus budget
Collection Activity	
Staff activity	Number of customer engagements per quarter versus plan
	Number of customer engagements leading to forbearance agreement
	Number of customer engagements leading to cash recovery
Cash recovery	Quarterly cash recovery from NPE / Total NPE stock
	Quarterly cash recovery from interest on NPE / Total NPE stock
	Quarterly cash recovery from capital & fees on NPE / Total NPE stock
	Quarterly cash recovery from property related liquidations; also as a percentage of Total NPE stock
	Quarterly cash recovery from non-property related liquidations; also as a percentage of Total NPE Stock
	Quarterly cash recovery from sales of NPEs; also as a percentage of Total NPE Stock
	Quarterly cash recovery from NPE; also as a percentage of Total NPE Stock
Forbearance Activity	
Debt forgiveness	Quarterly debt forgiveness
	Quarterly debt forgiveness / Specific assigned provisions
	Quarterly debt forgiveness / Total NPE stock
Accounting write-offs	Quarterly accounting write-offs (full and partial)
	Quarterly accounting write-offs (full and partial) / Specific assigned provisions
	Quarterly accounting write-offs (full and partial) / Total NPE stock
Forbearance activity	Value of NPE currently in short-term forbearance
	Value of NPE currently in long-term forbearance
	Value of recently agreed forbearance solutions by characteristics (e.g. payment holiday > 12 months)

	Value of loans currently in forbearance / Total NPE stock
	Value of PE currently in forbearance
	Quarterly non-performing forborne / Total NPE stock
	Total non-performing forborne / Total NPE stock
	Value of non-performing forborne currently experiencing financial difficulties
Re-default rate	Re-default rate on non-performing forborne
	Re-default rate on performing forborne
Debt/asset swap	Quarterly debt to equity swaps; also as a percentage of total NPE stock
	Quarterly debt to asset swap; also as a percentage of total NPE stock
Legal activity	
Legal activity	Value and count of loans currently in legal activity
	Value and count of assets recently foreclosed
	Quarterly value and count of new loans entering legal activity
	Quarterly value and count of loans exiting legal activity
	Average length of legal procedures recently closed
	Average recovery amounts from legal procedures recently closed (including total costs)
	Loss rate on loans exiting legal activity
P&L items stemming from NPLs	
Interest from NPLs	Interest payments recognised on NPLs in the P&L
	Percentage of recognised interest payments from NPLs actually received

Annex 4
Samples of early warning indicators

EWI at a borrower level from external sources	
External sources	Debt and collateral increase in other banks
	Past-due or other NP classifications in other banks
	Guarantor default
	Debt in private central register (if any)
	Legal proceeding
	Bankruptcy
	Changes in the company structure (e.g. merger, capital reduction)
	External rating assigned and trends
	Other negative information regarding major clients/counterparties of the debtor/suppliers
EWI at a borrower level from internal sources	
Companies	Negative trend in internal rating
	Unpaid cheques
	Significant change in liquidity profile
	Liabilities leverage (e.g. equity/total < 5% or 10%)
	Number of days past due
	Number of months with any overdraft/overdraft exceeded
	Profit before taxes/revenue (e.g. ratio < -1%)
	Continued losses
	Continued excess in commercial paper discount
	Negative own funds
	Payments delay
	Decrease of turnover
	Reduction in credit lines related to trade receivables (e.g. year-on-year variation, 3m average/1y average)
	Unexpected reduction in undrawn credit lines (e.g. undrawn amount/total credit line)
	Negative trend in behavioural scoring
	Negative trend in probability of default and/or internal rating
Individuals	Mortgage loan instalment > x time credit balance
	Mortgage and consumer credit days past due
	Decrease in the credit balance > 95% in the last 6 months
	Average total credit balance < 0.05% of total debt balance
	Forborne
	Nationality and related historic loss rates
	Decrease of payroll in the last 3 months
	Unemployment
	Early arrears (e.g. 5-30 days of past due, depending on portfolio/client types)
	Reduction in bank transfers in current accounts
	Increase of loan instalment over the payroll ratio
	Number of months with any overdraft, exceeded
	Negative trend in behavioural scoring
	Negative trend in probability of default and/or internal rating
EWI at a portfolio/segment level	
Portfolio distribution	

	Size distribution and concentration level
	Top X (e.g. 10) groups of connected clients and related risk indicators
	Asset class distribution
	Breakdown by industry, sector, collateral types, countries, maturities, etc.
Risk parameters	PD/LGD evolution (overall and per segment)
	PD/LGD forecasts and projections
	Overall EL
	Default exposure
LLP data	LLP stocks and flows (overall and per segment)
	Volumes and trends of significant risk provisions on individual level
NPL/forbearance status/foreclosure	NPL volume by category (>90 past due, LLP, etc.)
NPL/forbearance status/foreclosure	Forbearance volume and segmentation (restructuring, workout, forced prolongation, other modifications, deferrals, >90 past due, LLP)
	Foreclosed assets on total exposures
	NPL ratio without foreclosed assets
	NPL ratio with foreclosed assets
	NPL coverage (LLPs, collateral, other guarantees)

EWI by specific type of customers/sectors	
General	Customisable index data (GDP, stock markets, commodity prices, CDS prices, etc.)
Shipping	Shipping market indexes (e.g. Baltic Dry Index)
	Debt service coverage ratio (DSCR) and LTV scores
Aviation	Airline-specific indicators (passenger load, revenue per passenger, etc.)
Real estate	Real estate-related indexes (segment, region, cities, rural areas, etc.)
	Rental market scores and expected market value changes
Energy	Index data on regional alternative energy sources (e.g. wind quantities, etc.)
	Information-gathering system on potential technical or political risks on energy
Infrastructure/airports	Airport passenger data

Annex 5
Common NPL-related policies

Banks should develop, regularly review and monitor their adherence to policies related to the NPL management framework. For high NPL banks, the management body should review these policies and processes at least annually and proceed with any necessary amendments.

Having regard to the strategy of the bank (including its NPL strategy and operational plan where relevant) and the principle of proportionality, the following policies are expected to be established.

Arrears management policy

The purpose of this policy is to prescribe the bank's NPL operating model (see section 3.3), including at least the following elements:

- The structure and responsibilities of the NPL WUs as well as other units involved in the management of arrears (including NPLs), also defining clear hand-over triggers and link to portfolio segmentation;
    - the procedure to be followed by the functions involved to include at a minimum:
        - the procedure and handover criteria to be followed for each stage of arrears, i.e. pre-arrears, early arrears and late arrears.
        - the procedure to be followed in cases where a borrower is classified as non-cooperating and/or non-viable and the criteria for the borrower to be classified as such;
        - the communication[59] with the borrower at each step;
        - the tools and methods to be applied;
    - the human and technical resource requirements;
    - the minimum level of MI reports to be produced internally for monitoring purposes and regular updates to the management body.

[59] Communication with the borrower should be aligned with the legislative framework (e.g. code of conduct) of the country of operations.

Forbearance policy

The purpose of this policy is to outline the framework within which the bank may grant forbearance measures to borrowers that face or in the future may face financial difficulties (see chapter 4).

Indicatively, the policy should prescribe at least:

1. The necessary financial and non-financial documentation to be requested and provided by the borrowers[60] in order for the responsible credit officer to demonstrate repayment capacity on a principal and interest basis.

2. The minimum key financial repayment capacity metrics and ratios to be applied by the credit officer, detailed on a portfolio/product-specific basis in order to fully assess the borrower's repayment capacity.

3. The process to be followed in determining and implementing the most appropriate forbearance solution for a borrower:

   (a) For retail customers, it is expected that this should be illustrated by a decision tree similar to the one presented in the dedicated chapter on forbearance. For non-retail borrowers a decision tree approach may not be appropriate but the policy should provide clear instructions to the credit officer on how to assess the suitability of a forbearance treatment for a non-retail borrower.

   (b) In the case of borrowers for whom no solution can be reached (either non-viable and/or non-cooperating borrowers), the time-bound process and procedures for the transfer of these borrowers to the NPL WU responsible for liquidation.

4. A toolkit of short-term and long-term solutions as outlined in chapter 4.

   (a) Any forbearance solution should effectively involve a re-underwrite of the borrower to establish a sustainable debt structure and demonstrate repayment capacity on a principal and interest basis.

5. Clear instructions to the credit officer regarding the requirements for revaluation of collateral in line with chapter 7.

6. The decision-making process, approval levels and procedures for each type of forbearance solution and exposure levels up to management body level.

7. The process and procedure for the monitoring of the forbearance solutions awarded and borrower performance following the completion of a restructuring.

[60] Depending on the type of borrower, i.e. physical persons or legal entities, the required documentation is expected to differ.

   (a) These processes and procedures should clearly articulate the frequency of review of the borrower, what constitutes a re-default, process for reassessment and requirements for the reporting of re-defaults.

8. The range of pricing in accordance with the proposed solution and the type of borrower.

For item 2 above, banks should develop sector-specific (at a minimum regulatory reporting exposure classes) guidelines which establish the key financial metrics and ratios on a sector-specific basis (SMEs & corporates). For example, in the hotel sector the assessment may include average room rates, revenue per available room, occupancy, cash conversion, fixed costs as a percentage of total costs, variable costs as a percentage of total costs, maintenance capital expenditure, etc.

Debt recovery/enforcement policy

The NPL WUs responsible for debt recovery should take the most appropriate actions in a timely manner to improve debt collection and maximise debt recovery/minimise loss. Related processes and procedures should be defined in accordance with the NPL strategy in a debt recovery policy, which should address, at a minimum:

- The range of available options to resolve the case. Indicatively, the available options of a debt recovery unit are the following (not in any prescribed order):
    - voluntary asset sale (borrower re-engages and agrees to sell the asset)
    - forced asset sale via receivers/court proceedings (assets are not held on the balance sheet of a credit institution)
    - foreclosure of asset (assets are held on the balance sheet of a credit institution)
    - debt collection (internal or external)
    - debt to asset/equity swap;
    - sale of loan/loan portfolio to a third party.
- The procedure to be followed to decide the most appropriate recovery option and the team of experts to be involved (e.g. credit officer, lawyers, real estate experts, risk control) to assist in taking the decision.
- The recovery option should take into account the existence of collateral, type of legal documentation, type of borrower, local market conditions and macroeconomic outlook, the legislative framework in place and potential historical recovery rates per option vs. the costs involved per option.
- A clear definition of non-cooperating borrowers or link to related policies including such definition.

- A clearly defined approval process for each stage of the debt recovery process for the different recovery options available to the bank.
- The role of risk control and internal audit departments in the procedure and in the monitoring process.

With respect to the liquidation of collateral, the following should be defined in a policy.

- The valuation approach to be followed in respect of the asset (in line with chapter 7) including the liquidation costs to be applied both in a consensual and non-consensual sale scenario. The liquidation costs should be in line with requirements as set out in section 7.4.3.
- Involvement of internal or external experts.
- Potential limits to the amount of repossessed or foreclosed assets that will be acquired by the bank within a certain time period and potential limits to the amount of assets that could be held by the bank at any point of time.[61]
- The procedure to be followed post repossession or foreclosure to develop and implement a sale strategy, and the responsible unit within the bank to undertake the management of the assets concerned (may also be defined in a separate foreclosed/repossessed asset policy).

NPL classification and provisioning policy

Banks should adopt, document and adhere to sound methodologies that address policies, procedures and controls for assessing and measuring allowances on non-performing loans.[62]

- These methodologies should be reviewed at a minimum on an annual basis.
- Methodologies should clearly document the key terms, judgements, assumptions and estimates related to the assessment and measurement of allowances for non-performing loans (e.g. migration rates, loss events, collateral liquidation costs).[63] They should encompass appropriate conservatism and be supported by observed empirical evidence.
- Clear guidance on the timeliness of provisions by type of regulatory exposure classes if relevant (see section 6.6).
- Banks should adopt and adhere to written policies and procedures detailing the credit risk systems and controls used in their credit risk methodologies.[64]

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[61] To take into account industry concentration risk, e.g. in the real estate sector.

[62] BCBS Guidance on credit risk and accounting for expected credit losses, principle 2.

[63] BCBS Guidance on credit risk and accounting for expected credit losses, paragraph 29.

[64] BCBS Guidance on credit risk and accounting for expected credit losses, paragraph 31.

- Management judgements, estimates, considered assumptions and related sensitivity analysis should be subject to appropriate disclosures.
- Banks should, as a matter of best practice, back-test their loss rates on a regular basis. The supervisory expectation is that this should occur at a minimum every 6 months.
- In addition, banks should be sufficiently prudent when considering the write-back/reduction of existing provisions and ensure that the revised estimates and assumptions reflect the current economic condition and the current view of the expected economic outlook.
- Banks should also consider the contractual obligation of expected cash flows before considering including them in discounted cash flows

Write-off policy

As outlined in section 6.6, all banks should have a defined write-off policy to ensure the 'recoverability' of NPLs is assessed in a timely manner.

Considering the potential impact on banks' capital and the moral hazard that write-offs may cause, specific and clear rules should be put in place to ensure that their application is aligned with the bank's strategic planning, while an ongoing control mechanism should be established to identify their proper and prudent implementation.

The write-off policy/procedure documents should address at a minimum the following:

- the write-off approach to be taken on a specific portfolio/exposure class basis, i.e. under what conditions/circumstances write-offs are to be performed;
- whether a case-by-case approach is allowable and the procedures to be followed;
- the supporting documentation required to support a write-off credit decision;
- whether there will be a maximum amount of write-offs allowable on a borrower (connection)-level basis and on a portfolio-level basis;
- the credit approval limits relating to write-offs.

It is also recommended that appropriate authority limits be established regarding the implementation of debt write-off and debt forgiveness arrangements, given the significant financial and reputational implications associated with incorrect decisions.

Multi-bank distressed debt policy

Banks should also consider the interaction with other creditors for NPL borrowers with multiple creditors, usually corporate borrowers. Therefore, banks should put in place a clear procedure for negotiating and interacting with other financial institutions (or other third parties) with whom the borrower is indebted.

Collateral policies

Given the importance of credit risk mitigation in the NPL work-out process banks should develop clear and consistent collateral policies. These policies should comprehensively cover the management, valuation and reporting of all collateral types held as security for NPLs. Given the complexity and specialisation of some collateral items, banks should seek external expertise in drafting and reviewing these policies. By developing these collateral policies, banks will ensure a consistency of approach to managing and valuing similar collateral across the portfolio as per chapter 7 of this guidance.

Early warning/watch-list policy

A dedicated policy should be established specifying, amongst other things:

- the types of actions required in response to the different types of early warning alerts – relationship managers should not be able to suppress early warning triggers unless a suitable action has been taken and documented;
- escalation procedures;
- key elements, frequency and recipients of the reporting;
- hand-over criteria/link to NPL procedures.

Outsourcing/NPL servicing policy

A dedicated policy should be established for the outsourcing of services to third parties if this is relevant. This needs to include the required procedures for the selection of outsourcing partners, the required legal contract content and the decision-making process for outsourcing agreements as well as the monitoring of those agreements.

Annex 6
Affordability assessment for retail and corporate borrowers

Retail borrowers

In cases where the borrower has different categories of credit facilities with the bank (e.g. housing loan, credit card, consumer loan, etc.), the bank should look at "unbundling" the various credit facilities, constituent collateral and/or earnings streams. In its assessment the bank should look at these categories separately as well as in total to determine the most appropriate overall restructuring solution(s). The following aspects should also be addressed.

- Consideration of the borrower's personal financial and non-financial information.
- Consideration of the borrower's overall indebtedness, especially as regards unsecured debt repayment commitments and the consequences of non-payment.
- Agreed programme of loan repayments should be equal to or less than the remaining available income after deducting all expenses and commitments.
- Analysis/assessment of historic data to trace the timing and reasons of the borrower's financial difficulties and provide an indication of the viability of the restructuring solution offered.
- Assessment of borrower expenditure levels should take account of likely future expenditure increases. At a minimum banks should be able to demonstrate that increases in line with inflation have been considered but they should also be able to demonstrate that increases specific to the borrower and their unique circumstances have been taken into account (for example an increase in dependents or future education costs etc.).
- Where future and specific expenditure decreases are being taken into account (dependents exiting education and entering the workforce, for example) banks should be able to demonstrate that a conservative approach has been taken in considering these decreases, that they are plausible and practical over the life of the revised solution and that they will not place an unreasonable burden on the borrower.
- Assessment of whether proposed restructuring solution would be in line with the borrower's individual needs to maintain a certain living standard.
- Assessment of the borrower's current and future repayment ability.

For the current repayment ability, indicatively the following should be taken into account:

- personal financial and non-financial information (e.g. dependants, household needs, occupation, income, expenditure, etc.);
- overall indebtedness;
- current repayment capacity;
- previous repayment history;
- reasons for arrears (e.g. salary reductions, job loss, etc.);
- age and level of arrears;
- appropriateness of the property size to the borrower's accommodation needs.

For the future repayment ability, indicatively the following should also be taken into account:

- income;
- years to retirement vis-à-vis duration of loan;
- life cycle stage;
- dependents and their age;
- employment status/prospects;
- industry sector;
- savings and assets;
- loans and other obligations;
- future repayment capacity;
- minimum living standard;
- relevant labour market indicators;
- known future changes to the borrower's circumstances.

In addition, the following should apply:

- For the capitalisation of arrears, the bank should assess and be able to provide evidence that the borrower's verified income and expenditure levels are sufficient to enable them to service the revised loan repayment on an affordable basis for the duration of the revised repayment schedule and the borrower has been performing against the revised arrangement for 6 months before arrears are capitalised.

- For a term extension, the borrower's age should be taken into account. In this regard, if the borrower is subject to a compulsory retirement age, for a mortgage extension beyond that term such extension will only be considered sustainable where the bank has assessed and can demonstrate and provide evidence that the borrower can, through a pension or other sources of verified income, service the revised loan repayments to maturity on an affordable basis.
- Affordability assessment of guarantors (if applicable).

Types of documentation

As a minimum, the following information should be obtained when restructuring a retail loan:

- personal financial and non-financial information of borrower (e.g. dependants, household needs, occupation, income, expenditure, etc.);
- overall indebtedness;
- latest independent valuation report of any mortgaged immovable properties securing the underlying facility;
- information on any other collateral securing the underlying loan facilities (e.g. fixed charge, life insurance, third party guarantees);
- latest valuations of any other collateral securing the underlying loan facilities;
- verification of variable elements of current income;
- assumptions used for the discounting of variable elements;
- relevant labour market indicators.

Corporate borrowers

- In cases where the borrower has different categories of credit facilities with the bank (e.g. SME loan, CRE loan etc.), the bank should look at "unbundling" the various credit facilities, constituent collateral and/or earnings streams. In its assessment the bank should look at these categories separately as well as in total to determine the most appropriate overall restructuring solution(s).
- Consideration of the overall indebtedness of the borrower as prescribed in the national credit register bureau, especially for the borrower's unsecured debt repayment commitments and the consequences of non-payment.
- Analysis/assessment of historic data to trace the timing and reasons of the borrower's financial difficulties and provide an indication as to the viability of its business model

- Analysis/assessment:
  - of the company's business plan (e.g. SWOT analysis, projected financial ratio analysis, industry sector analysis);
  - of the company's historic financial data, which may help trace the trigger event of the company experiencing difficulties and may provide an indication as to the viability of its business model.
- Review of the cash-flow forecast provided by the borrower, taking into account:
  - the cash-flow forecast, which should cover all recurring items in appropriate detail to ensure a maximum coverage;
  - the business model/business activity of the borrower or the economic environment both past and future;
  - scrutiny and assessment for reasonableness of projections and assumptions;
  - borrower's facilities with other banks, major expenses, capital expenditure, disposals, equity contribution, other amounts due (fines, taxes, social insurance, insurance, pension funds) etc.
- Cash-flow ratio analysis:
  - based on the latest financial statements (audited or management);
  - based on the cash-flow forecast.
- Agreed programme of loan repayments is equal to or less than the projected available free cash flows according to the cash-flow forecast.
- Affordability assessment of guarantors (if applicable).

Types of documentation

As a minimum, the following information should be obtained when restructuring a non-retail loan:

- latest audited financial statements and/or latest management accounts;
- verification of variable elements of current income;
- assumptions used for the discounting of variable elements;
- overall indebtedness;
- business plan and/or cash-flow forecast, depending on the size of the borrower and the maturity of the loan;

- latest independent valuation report of any mortgaged immovable properties securing the underlying facility;
- information on any other collateral securing the underlying loan facilities (e.g. fixed charge, life insurance);
- latest valuations of any other collateral securing the underlying loan facilities;
- historical financial data;
- relevant market indicators (unemployment rate, GDP, inflation, etc.).

Annex 7
Summary of supervisory reporting and disclosures related to NPLs

The process of balance sheet repairs requires proper identification and management of NPLs. Transparency is an important building block of this proper management.

Specific disclosures on relevant aspects of the identification, impairment and payment of NPLs should improve stakeholders' confidence in banks' balance sheets and ultimately increase the willingness of markets to play a role in the management of NPLs for which high quality information has become available.

In order for banks to convey their risk profiles comprehensively to market participants, the ECB recommends, therefore, that they disclose additional NPL-related information to that required under Part Eight of the CRR (Article 431). A summary of additional supervisory reporting and disclosure items related to NPLs is provided below.

Chapter 2: NPL strategy

Example/extract of NPE and foreclosed asset strategy template[65]:

Credit institution:		Actual	Projections					
xxxx								
Operational TARGETS and KPIs		2016	2017 1H	2017	2018	2019	2020	2021
Line								
PART A: Stocks & Flows								
1	**NPE Volume (Gross)**							
2	of which: Past due > 90 days							
3	of which unlikely to pay							
4	**NPE Volume (Net)**							
5	of which: Past due > 90 days							
6	of which unlikely to pay							
7	**Total loans (Gross)**							
8=1/7	NPE Ratio							
9=2/7	90 dpd ratio							
10=3/7	unlikely to pay ratio							
11=12+19	**NPE Flows (Gross)**							
12=13+16	**NPE transitions (+/-)**							
13=14+15	**From performing to non-performing(+)**							
14	of which: from non-forborne performing to NPE							
15	of which: from forborne performing to NPE							
16=17+18	**From non-performing to performing(-)**							
17	of which: from NPE to non-forborne performing							
18	of which: from NPE to forborne performing							
19=20+29	**NPE reduction/increase**							
20=21+22+23+24+25+26+27+28	**Sources of NPE balance sheetreductions (-)**							
21	Cash recoveries							
22	Sales of NPEs (Gross)							
23	Write-offs							
24	Collateral liquidations (cash)							
25	Foreclosure							
26	Debt to equity swaps							
27	Significant risk transfer							
28	Other adjustments							
29=30+31+32	**Other sources of NPE increase (+)**							
30	Purchase of loans							
31	Additional disbursements to customers with NPE							
32	Arrears capitalisation							
33=34+37+38+39	**Cash recoveries from NPEs**							
34=35+36	**Cash recoveries from collections of NPEs**							

[65] Banks will receive the relevant template(s) from their Joint Supervisory Teams. The above is a sample/extract only. The actual template will probably incorporate additional tables, including foreclosed assets, macro assumptions and vintage information.

Credit institution:									
xxxx		Actual	Projections						
Operational TARGETS and KPIs		2016	2017 1H	2017	2018	2019	2020	2021
Line									
35	of which:principal amount							
36	of which:Interest amount							
37	**Cash recoveries from liquidations of NPEs**							
38	**Cash recoveries from sales of NPEs**							
39	**Other cash collections**							
40=41+42+43	**Loss budget**							
41	Envisaged use of impairment allowance							
42	Envisaged use of capital (amount not covered by impairment allowance)							
43	Associated tax impact							
44	Estimated CET1 amount impact from implementation of NPE strategy							
45	Estimated RWA impact from implementation of NPE strategy							
46=47+48	**Forborne exposures (Gross)**							
47	of which: Forborne non-performing exposures							
48	of which: Forborne performing exposures							
56	NPE (gross) where an independent servicer has been contracted							
57	Total denounced loans (gross)							
58	Denounced loans for which legal action has been initiated (gross)							

NPL strategy documentation, including related templates, should be submitted to the supervisor with no expectation for it to be disclosed.

Chapter 4: Forbearance

Public disclosures – forbearance

In order for banks to convey their risk profiles comprehensively to market participants, the ECB recommends that they disclose the following quantitative information in addition to that required pursuant to Part Eight of the CRR (Article 431):

- Credit quality of forborne exposures: with the separate identification of forborne exposures which, at the disclosure date, are performing, non-performing, defaulted, and impaired, with the associated amount of impairment raised separately for performing and non-performing exposures. Where relevant, the identification by credit quality can be broken down at the level of exposure classes, using either the regulatory exposure classes in Regulation (EU) 575/2013 or other appropriate exposure classes. Non-financial corporates should be further broken down by sector and geography and households should

be further broken down by business line and geography if specific concentrations exist.

- Quality of forbearance: including forborne exposures by number of forbearance measures granted in the past and redefaults having occurred in the past 12 months (using 12-month cure period as outlined in section 3.5.3).
- Ageing of forborne exposures: time since the granting of forbearance measures, across a sufficient number of time brackets (<3 months, 3-6 months, etc.).
- Net present value impact of forbearance measures granted in the past 6/12/24 months.

To facilitate consistent disclosures across banks, example tables are included below for guidance to banks.

The templates below are designed to offer guidance to institutions on the implementation of the above-listed items. While institutions remain free to use a different format for the disclosure of the above-listed items, this different format should provide at least a similar granularity of these disclosures for elements that are applicable and material – materiality being assessed in accordance with the relevant EBA Guidelines.

Table 5

Public disclosure example tables for forbearance

a. Credit quality of forborne exposures

	All forborne exposures (million €)					Impairment, provisions and value adjustments				Collateral and financial guarantees received on forborne exposures
						Performing forborne exposures		Non-performing forborne exposures		
		of which: performing past-due	of which non-performing	of which: impaired	of which: defaulted		of which: value adjustments		of which: value adjustments	
Debt securities (including at amortised cost and fair value)										
Central banks										
General governments										
Credit institutions										
Other financial corporations										
Non-financial corporations										
Loans and advances (including at amortised cost and fair value)										
Central banks										
General governments										
Credit institutions										
Other financial corporations										
Non-financial corporations (consider breakdown)										
Households (consider breakdown)										
DEBT INSTRUMENTS other than HFT										
LOAN COMMITMENTS GIVEN										
TOTAL EXPOSURES WITH FORBEARANCE MEASURES										

b. Quality of forbearance

	Forborne exposures (million €)
Having been forborne more than once	
Having been forborne more than twice	
Having re-defaulted in the past 12 months	

c. Forborne exposures by credit category

	< 3 months	3-6 months	6-12 months	> 12 months
TOTAL EXPOSURES WITH FORBEARANCE MEASURES				
of which: performing exposures				
of which: non-performing exposures				

d. NPV impact of exposures forborne in the past 6/12/24 months

	Past 6 months	Past 12 months	Past 24 months
Net present value of original contract cash flows			
Net present value of forborne contract cash flows			
Description of discounting approach applied by the bank			

Supervisory reporting – forbearance

A breakdown of forborne exposures by major types of forbearance option, separately for short-term and long-term forbearance measures (where relevant if forbearance affects some exposure classes more than the others, a breakdown can be made at

the level of exposure classes, or exposure classes can be identified separately), should be provided to supervisors at least on an annual basis (unless requested more frequently by the supervisor) as indicated in the table below.

Table 6

Additional supervisory reporting on the use of different types of forbearance options

For forbearance options multiple options can apply for a single exposure and amounts should be included for each relevant option; thus “Total” is not expected to be the sum of all options granted

		Year t		Year t-1	
		All forborne exposures (million €)		All forborne exposures (million €)	
			of which non-performing		of which non-performing
Short-term options granted					
of which	Interest only				
	Reduced payments				
	Grace period/payment moratorium				
	Arrears/interest capitalisation				
	Other (providing detail if significant)				
Long-term options granted					
of which	Interest rate reduction				
	Term extension				
	Additional security				
	Rescheduled payments				
	Debt forgiveness				
	Voluntary sale				
	Other (providing detail if significant)				
Total					

Chapters 5 and 6: NPEs, impairment and write-off

Public disclosures

ESMA has encouraged financial institutions to use the definitions of NPE and forbearance in Commission Implementing Regulation (EU) No 680/2014 for their financial statement disclosures and to explain the relationship between NPLs, defaulted and impaired loans applied in the institution.[66] On disclosures, banks should consider the EBA ITS supervisory reporting requirements as established in Commission Implementing Regulation (EU) No 680/2014 as a benchmark.

Information that banks are expected to disclose in accordance with Part Eight CRR and with appropriate cross-reference to their financial statements are as follows:

- The assumptions underlying the definition of non-performing exposures and how they compare with the assumptions used for identifying impaired financial assets and defaulted exposures, including:

[66] See ESMA PS and ESMA, Review of Accounting Practices – Comparability of IFRS Financial Statements of Financial Institutions in Europe (2013).

- materiality thresholds for the identification of non-performing exposures on the basis of the 90 days past due criterion;
- methods used for days past due counting;
- indicators of unlikeliness to pay used;
- effective average duration of the cure period and probation period;
- the impairment policy for non-performing exposures:
  - impairment triggers and thresholds considered when assessing whether a loss event has occurred;
  - key management judgements, estimates and assumptions used in the determination of collective provisions;
  - policy on the reversal of impairment;
  - sensitivity analysis on changes to key assumptions.

- Information on whether collective and individual impairment on performing and non-performing exposures are treated as specific credit risk adjustments or as general credit risk adjustments.
- A reconciliation of the definitions of non-performing, impaired, defaulted, restructured/modified assets and forborne exposures. This reconciliation should comprise both a conceptual explanation of the differences and quantitative information on the effects of these conceptual differences.
- Performing, performing past due, and non-performing exposures, with separate identification of exposures more than 90 days past due, exposures unlikely to pay, impaired and defaulted exposures by exposure classes.
- Ageing of performing and non-performing exposures that are past due.
- The individual and collective impairment allowance raised against performing and non-performing exposures by exposure class, sector and geography, where relevant distinguishing between impairment that qualifies as specific credit risk adjustment and as general credit risk adjustments.
- The individual and collective impairment charges recognised on performing and non-performing exposures by exposure class, sector and geography.
- When the accounting standards recognise impairment on all assets based on an expected loss model, a breakdown of performing and non-performing exposures as well as their associated accumulated impairment and impairment charges by stages, where relevant distinguishing between impairment that qualifies as specific credit risk adjustment and as general credit risk adjustments. The breakdown by stages should be performed by exposure class, sectors and geography.

Write-offs

- The amount of accumulated written-off NPEs, as well as the amount of NPEs written off during the reporting period, with the impact of these write-offs on the amount of impairment and the P&L by exposure class, sector and geography. The amount of NPEs written off during the reporting period should simultaneously be broken down by ageing.

Cash collections

- Payments collected on NPEs and their attribution to P&L:
    - cash collected on non-performing exposures, separately for cash stemming from repayments by the borrower and cash stemming from collateral recoveries (sale of repossessed collateral);
    - the split of cash payments between amounts allocated to the repayment of interest and amounts allocated to the repayment of principal;
    - the amount of interest accrued on non-performing exposures;
    - a comparison between the amount of interest accrued and the amount of cash collected on non-performing exposures.
- A breakdown of the payments received and accounted for into exposure classes, credit segments, sectors or geography may be useful in the case of a particular concentration of asset quality issues.

Supervisory reporting

In relation to the estimation of allowances on a collective basis, banks should, at a minimum, be able to provide the data in Table 7 on the models they use to calculate impairment allowances for NPEs on a collective basis. The data should be provided on an annual basis or more regularly if requested by supervisors. Elements in columns C, D and E should be reported at the level of the segments described in column B (further details below).

Table 7
Supervisory reporting on the estimation of allowances on a collective basis

A. Portfolio		B. Segment	C. LGD				D. Cure rate				E. NPE exposure at default
A.1 Sector of the counter-party	A.2 Residence of the counter-party		C.1 Rate in %	C.2 Calibration period	C.3 Adj. for current conditions	C.4 Alt. approach applied	D.1 Rate in %	D.2 Calibration period	D.3 Adj. for current conditions	D.4 Alt. approach applied	

Explanation of table content:

A. Description of the NPE portfolios to which the segments described in B pertain to:

- A.1 Sector of the counterparty as per FINREP 20.4;
- A.2 Country of residence of the counterparty.

B. Description of each granular group of exposures with shared credit risk characteristics created for the purpose of the collective estimation of provisions. This should specify the segmentation criteria (e.g. product type, collateralisation, client segment, etc.) applied.

C. Description of loss given default as applied at the level of the segment described in B:

- C.1 LGD applied in %;
- C.2 Calibration period for historical data used (e.g. "2010-2015") to estimate C.1;
- C.3 If applicable, description of adjustments made to historical data used in estimation (e.g. to reflect current conditions);
- C.4 If C.1 has not been estimated based on historical data (i.e. C.2/C.3 are not applicable), description of the alternative approach applied.

D. Cure rate for NPLs as applied at the level of the segment described in B:

- D.1 Cure rate applied in %;
- D.2 Calibration period for historical data used (e.g. "2010-2015") to estimate D.1
- D.3 If applicable, description of adjustments made to historical data used in estimation (e.g. to reflect current conditions);
- D.3 If D.1 has not been estimated based on historical data (i.e. D.2/D.3 are not applicable), description of the alternative approach applied.

E. Aggregated NPE exposure at default in € million at the level of the segment described in B

Interest Accrued – NPLs

Regarding the interest accrued on NPLs, on an annual basis or more regularly if requested by supervisors banks should, at a minimum, be able to provide the data in Table 8 below in respect of interest accrued on NPLs.

Table 8
Supervisory reporting on interest accrued on NPEs

€m	Original effective interest income in Profit & Loss (before impairment)	Accrued effective interest income after consideration of impairment and unwinding	Cash collected (only Interest-related)
Total loans			
Performing loans			
Specifically/individually assessed NPLs, of which			
- impaired			
- not impaired			
- forborne			
Restructured unimpaired NPLs			
≤90 dpd			
>90 dpd			
Non-restructured unimpaired NPLs			
≤90 dpd			
>90 dpd			
Collectively assessed NPLs			
Impaired NPLs			
Unimpaired NPLs			
Restructured unimpaired NPLs			
≤90 dpd			
>90 dpd			
Non-restructured unimpaired NPLs			
≤90 dpd			
>90 dpd			

Chapter 7: Collateral valuation

As part of their public disclosures, institutions should provide, ideally by cross reference to the disclosures in their financial statements, quantitative information on the following:

1. The collateral and guarantees held against performing and non-performing exposures by exposure class, sector and geography.

2. For the most relevant collateralised NPE portfolios and for total NPEs, a breakdown of collateral (latest updated valuation (in accordance with chapter 7)), NPV expected taking into account the disposal time and costs until disposal as well as provisions by type of asset and different NPE vintages (i.e. time since NPE classification in years).

3. Foreclosed asset values by type of assets and vintage as well as related provisions. A breakdown of regulatory exposure classes into credit segments may be useful to present meaningful results.

Annex 8
Risk transfer of NPLs

When securitising or otherwise transferring their NPLs in a un-tranched form, it is essential that banks pay attention to the following elements:

- a realistic estimation of cash flows used to repay the resulting securitisation liabilities, which in the case of NPLs are generally not regular;
- the valuation of associated collateral securing the NPLs (in line with chapter 7 of this guidance);
- all structuring costs involved in the transaction;
- the associated regulatory requirements.

Securitisation transactions require a significant risk transfer assessment, additional reporting and disclosures, and a retention of at least 5% of the economic interest. The junior tranches, at least, generally have an associated risk weight of 1250%. In addition, the institution should reflect the securitisation in its ICAAP and ILAAP, and should also consider operational risk (e.g. legal risk associated with the transfer of the NPLs), reputational and other risks which might increase with the transaction. The significant risk transfer should be approached in accordance with the ECB Public Guidance on the recognition of significant credit risk transfer of 24 March 2016[67].

Risk weights for specialised lending might be applicable in some cases to risk-transfer transactions (for instance those transactions where the underlying exposures are physical assets over which the lender has substantial control, provided that the conditions listed in Article 147(8) of the CRR are met). Therefore the prudential treatment of transactions should always be determined on a case-by-case basis.

Risk transfers not classified as prudential securitisations[68] might also require authorisation by the competent authorities or other bodies, depending on national law (for instance for the divestment of assets or for substantial changes in a bank's risk profile).

Although a significant risk transfer cannot be achieved in such cases, NPL risk transfers other than securitisations can still lead to derecognition and deconsolidation from a regulatory point of view under certain conditions. These are generally linked to the accounting treatment of the transactions. In this context, it

[67] https://www.bankingsupervision.europa.eu/ecb/pub/pdf/guidance_significant_risk_transfer.en.pdf

[68] As defined in Article 4(1)(61) of the CRR, i.e. involving credit risk tranching, repayments being performance linked to the underlying exposures, and an allocation of losses during the life of the transaction

should be noted that the ECB expects to be consulted on all risk transfer transactions at an early stage.

When assessing whether such NPL risk transfer transactions (other than securitisations) meet the conditions for regulatory deconsolidation/derecognition, the ECB will consider whether the residual risks retained are appropriately covered. If not, the regulatory treatment it adopts for the transactions could deviate from the accounting treatment and lead to additional capital charges being imposed. This could apply, for example, if the originating bank is also providing funding in any form to the investing vehicle, resulting in a potential delay of loss recognition for the transferring bank, or if the transferring bank is expected to provide support, beyond its contractual obligations, to the risk transfer transaction.

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Questioni di Economia e Finanza

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NON-PERFORMING LOANS AND THE SUPPLY OF BANK CREDIT: EVIDENCE FROM ITALY

by Matteo Accornero*, Piergiorgio Alessandri*, Luisa Carpinelli*
and Alberto Maria Sorrentino*

Abstract

We employ an extensive dataset on borrower-level loans to study the influence of non-performing loans (NPLs) on the supply of bank credit to nonfinancial firms in Italy between 2008 and 2015. We use time-varying firm fixed effects to control for shifts in demand and changes in borrower characteristics, and we also exploit the supervisory interventions associated with the 2014 Asset Quality Review to identify exogenous variations in the banks' NPL ratios. We find that banks' lending behavior is not causally affected by the level of NPL ratios: the negative correlation between NPL ratios and credit growth in our data is mostly generated by changes in firms' conditions and contractions in their demand for credit. However, the exogenous emergence of new NPLs and the associated increase in provisions can cause a negative adjustment in credit supply.

JEL Classification: E51, E58, G00, G21.
Keywords: credit register, credit risk, credit supply, non-performing loans.

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* Bank of Italy. DG for Economics, Statistics and Research.

1. **Introduction**

Does a build-up in non-performing exposures (NPLs) impair banks' capacity to finance the real economy? This question ranks high on the list of issues European policy makers have been grappling with over the past few years. The reasons are clear. Since the onset of the global financial crisis in 2008, the stocks of NPLs on the balance sheets of European banks have risen substantially; in Italy NPLs tripled, reaching 18 per cent of total loans in 2015. Besides raising concerns on the soundness of the banking sector, this phenomenon might trigger a vicious circle where the contraction in credit supply driven by the level of NPLs lead to lower growth, a slower recovery and hence a further deterioration in bank balance sheets.

Yet, as of today, formal evidence on the role and importance of bad legacy assets in shaping banks' lending policies is hard to come by. Two main issues need to be addressed in this discussion; one is conceptual, the other methodological. First, the raw correlation between credit quality (either in stock or flow terms) and credit growth observed in aggregated data can be misleading because rising NPLs are largely the endogenous product of a prolonged economic stagnation that weakens both the demand and the supply of credit. Second, there is a good deal of confusion between the stock and the flow of NPLs as the key factor that could depress lending. The debate has focused to a great extent on the *level* of NPL ratios, yet often referring to arguments that are more likely to apply to *variations* in those ratios. The implications of *higher* NPL ratios and *increasing* NPL ratios are not necessarily the same, even from a theoretical point of view. High NPL ratios might in principle exert a permanent effect on banks via a riskier asset side, which could spur the combined influence on credit of regulatory constraints, market pressures on funding and a risk-taking mechanism. An increase in NPL ratios presumably produces an effect via profit and loss accounting, inducing banks to temporarily modify their lending policy while they adjust some quantities, notably provisions, to restore equilibrium in their balance sheets. In short, assessing whether the stock of NPLs affects credit supply involves two tasks: one is to disentangle supply and demand, the other one is to separate the related but distinct mechanisms through which stocks and flows of NPLs might affect credit.

We address the first issue thanks to the granularity of our unique dataset, where the NPL ratios of all Italian banks are merged with information on banks' balance sheets and with data on borrower-level loans to Italian firms between 2008 and 2015. Since firms typically borrow from more than one bank at the same time, we can use time-varying firm fixed effects to capture unobserved changes in borrower characteristics, and test whether banks with different credit quality behaved in a different way towards *the same firm* at the *same point in time* (Jiménez et al., 2014). In this set up, changes in firms' profitability, creditworthiness, investment opportunities and demand

for funds are separately accounted for, and the significance of the indicator of credit quality – if any – can be safely interpreted as evidence of supply-side effects.

To examine the impact of the level of NPL ratios, we exploit the variability across banks and time of the share of non-performing exposures in our large panel of over 500 banks to assess how this weighs on credit. To separately account for the implications of exogenous variations in NPLs, we take advantage of the information coming from the Asset Quality Review (AQR), the in-depth supervisory credit book revision of 130 European banking groups carried out by the European Central Bank and national supervisory authorities in 2014. If the balance sheet adjustments brought about by the AQR in December 2014 were (i) not correlated with changes in firms' conditions in 2015, and (ii) not entirely anticipated by the banks that took part in it, then they can be seen as exogenous "shocks" and, as such, can help us understand whether fluctuations in NPLs are an important driver of bank lending.[1]

We have two main results. First, the level of NPL ratios *per se* does not influence bank lending. The negative correlation between NPL ratios and credit growth over the 8 years of analysis is almost entirely driven by firm-related factors: once these are properly accounted for (in our case, via time-varying firm fixed effects), a bank's lending behavior appears to be unrelated to its NPL ratio. However, consistently with previous literature, we find that other bank-related factors such as capital ratios and size actively influence credit supply during the period under consideration. Second, "exogenous" increases in NPLs may have a negative effect on bank lending, similarly to negative shocks to banks' capital buffers.

The fact that the NPL ratios did not matter suggests that, in our sample, their movements were largely driven by cyclical phenomena rather than by bank-specific shocks. In particular, the correlation in the data must have been caused by a deterioration in economic conditions that acted simultaneously on banks (causing the increase in NPLs) and firms (leading to a drop in profitability and a decline in the demand for loans). Of course this result might be specifically related to a period of prolonged macroeconomic weakness; in more favorable conditions with booming demand for credit the possibility that high NPL ratios might act as a drag on credit supply cannot be ruled out.

The remainder of the paper is organized as follows. In Section 2 we discuss the economics of the relation between NPLs and credit supply and we summarize the existing literature on the topic. In Section 3 we describe our dataset. In Section 4 we present a set of stylized facts on the relation between NPLs, credit flows and bank funding costs. In Section 5 and 6 we move to a more formal econometric analysis of, respectively, the level of NPL ratios and NPL variations. The results are discussed further in Section 7. Section 8 concludes.

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[1] The logic and limitations of our identification strategy are discussed in detail in Section 6.

2. The role of NPLs: transmission mechanisms and existing evidence

In order to examine the relation between NPLs and credit supply, it is useful to make a distinction between the impact of the level of NPL ratios and the impact of an increase of NPLs. Simplifying to the core, evaluating how different levels of NPL ratios affect credit supply boils down to making a sort of comparative statics exercise; gauging the impact of a rise of NPLs is equivalent to assessing a transition from one state (one with lower NPL) to another (with higher NPL). Of course, the mechanisms operating in the two scenarios are connected, yet we deem this distinction particularly useful to clarify the mechanisms at work and we will use it as a guide to our analysis.

The worse quality of the balance sheet associated to a high level of the stock of NPLs could in principle affect the supply of credit through three types of channels: a mechanical accounting mechanism, by which lower credit quality ultimately affects bank capital via risk weights, an increase in funding costs stemming from heightened market pressures, and a change in the bank's risk-taking attitude.

First, high levels of NPLs imply a risky asset side. Given that intermediaries are subject to prudential regulations on capital, a worsened credit quality translates into higher risk weights on bank loan portfolios in the calculation of regulatory capital ratios as a measure to cover expected risk. To cope with increased risk weights and capital absorption banks might decide to reduce the size of their balance sheet. Furthermore, if the cost of capital becomes permanently higher due to heightened credit risk, banks might adopt a permanently lower rate of expansion of their asset base.[2]

A second possibility is that high-NPL banks are forced to scale down their operations by market pressure rather than deleveraging out of their own will. If a heavier burden of NPLs is taken as a sign of higher idiosyncratic risk and/or lower managerial abilities, and if this is deemed not to be fully offset by an adequate coverage ratio, then the bank's external funding costs should also be higher. In this case the higher funding costs brought about by higher NPLs can cause a decline in loan supply.

Finally, NPLs might change banks' risk attitudes. Thinly capitalized banks are more sensitive to the "risk taking channel" of monetary policy and more willing to extend credit to weak borrowers at times of low interest rates.[3] Intriguingly, this channel pushes in the opposite direction compared to those discussed above: in this case high-NPL banks have an incentive to lend *more* than their

[2] Under IRB (internal ratings-based approach), banks must calculate their risk weights on the basis of the losses their realize on non-performing exposures (among other factors); in this case, the managers' independent response to a rise in NPL might be reinforced by the regulatory pressure due to an increase in the capital absorption of the rest of the loan portfolio.

[3] Jiménez et al. (2014).

competitors – and possibly more than they should, at overly lax conditions, and/or to the wrong borrowers – following a 'gamble for resurrection' type of logic.[4]

On the other hand, increases in NPLs might have different implications. An rise of NPLs, especially if large, unexpected and experienced at times of low profitability, implies a great deal of adjustment for banks, both automatic and voluntary, to restore balance sheet conditions. Most of this adjustment operates through the profit and loss account. To keep an appropriate coverage ratio – and hence protect itself against risk associated to mounting NPLs – a bank must increase loan loss provisions so to reduce its exposure to the borrowers' defaults. Higher provisions depress the bank's return on assets and, if they are large or prolonged enough, can even cause profits to become negative, depleting the capital base. In short, the readjustment on the asset side triggered by an increase in NPLs may have broadly the same implications as a decline in capital, and a depletion of the capital buffers is known to determine a contraction in credit supply.[5]

All in all, the lack of a well-defined theoretical framework makes it difficult to fully characterize the interactions between these mechanisms and the conditions under which each of them might operate. A higher level of NPL is likely to be associated with permanently higher risk weights and higher funding costs; its effect on credit depends on whether the bank is able to offset the contractionary pressures via adequate capitalization and coverage ratios. Since it relates to the overall solvency of the bank, the risk appetite channel might also depend on the outstanding stock of NPLs, particularly if the informational asymmetry between managers and external stakeholders are pronounced and insiders have much better information on the actual quality of the assets. On the other hand, an increase in NPL triggers mechanisms that rely on frictions that banks ought to be able to mitigate in the longer term, when they have the possibility to raise capital or adjust provisions without squeezing their profit margins too heavily.

The literature has thus far focused on the drivers rather than the implications of NPLs. These have been found to depend both on bank characteristics and on the macroeconomic performance of the economies where the banks operate.[6] The relevance of macroeconomic dynamics highlights the key endogeneity issue that undermines any attempt to identify a causal impact of NPLs on credit supply: NPLs rise in countries and periods where economic activity stagnates and, consequently, creditworthiness is deteriorated and the demand for credit also tends to be weak. This means that a negative correlation between NPLs and credit volumes, in and by itself, means very little. The role of bank-specific factors, on the other hand, corroborates the idea that NPLs might also act as a

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[4] See e.g. Krugman (1998).

[5] See e.g. Froot and Stein (1998), Van den Heuvel (2008), Aiyar et al. (2014). Capital buffers also matter for the transmission of monetary policy (Gambacorta and Mistrulli, 2004). For the role of capital during crises, see Beltratti and Stultz (2012), Berger and Bouwman (2013), Dagher et al. (2014).

[6] Bofondi and Ropele (2011), Louzis et al., (2012), Klein (2013), Messai and Jouini (2013).

signal on the (idiosyncratic) weakness or misbehavior of the underlying banks. Increases in NPLs are indeed often anticipated by credit expansions and a loosening of lending standards.[7] They are also associated with prior reductions in banks' overall cost efficiency, suggesting that the two phenomena (high costs and high NPLs) might be symptoms of a common underlying problem, such as poor managerial practices.[8] As of today, however, little is known as to whether and how these factors exert any influence on banks' lending strategies.

Kaminsky and Reinhart (1999) note that high NPLs are often associated with the outbreak of banking crises but both can be the result of macroeconomic forces that weaken simultaneously the banking sector and the real economy, such as strong exchange rate appreciations. Balgova et al. (2016) study the relation between output growth and changes in NPL stocks using aggregate data on a panel of 100 countries between 1997 and 2014, finding that countries that actively reduced their NPLs typically experienced higher growth rates. Bending et al. (2014) estimate dynamics regressions using bank-level data for a sample of intermediaries from 16 European countries (excluding Italy) and document that both NPL ratios and changes in NPLs are negatively correlated with net growth in corporate and commercial loans in the following year. Cucinelli (2015) obtains a similar result for Italy, arguing that both NPLs and the loan-loss provision ratio (two similar proxies of the credit quality of the bank's portfolio) have a negative impact on the supply of bank loans. A common denominator on these works is the high level of aggregation of the data. The evidence points to a strong negative correlation between NPLs and credit; however, endogeneity problems are pervasive, and imply that moving from a statistical to a causal statement on the basis of country- or bank-level observations is fairly problematic. Against this backdrop, our main contributions to the debate are to (i) discriminate more explicitly between stocks and flows of NPLs, and (ii) exploit a loan-level dataset where identification is stronger and causality can be established with a higher degree of confidence.

3. Our dataset

Our analysis is based on an extensive dataset at the bank-firm level. For every firm we gather information on credit obtained by any bank operating in Italy.[9] For every bank, in turn, we recover a large set of balance sheet indicators, including the NPL ratios. We rely on two main sources.

[7] Keeton (1999), Jiménez and Saurina (2006).
[8] Berger and De Young (1997).
[9] We consider banking groups and individual banks for those not belonging to a group.

For bank-firm credit relationships we use information on outstanding loan amounts from the Italian Credit Register (henceforth CR), over the period from 2008 to 2015. The CR records various end-of-year information on all loans exceeding 30,000 euros.[10] We focus on all non-financial firms, including very small firms, such as sole proprietorships. Data on credit quantity consists of both granted and drawn credit; as dependent variable we focus on granted credit, as this is more responsive to supply dynamics. Loans are made of three different categories of credit: revolving credit lines, term loans and loans backed by accounts receivable.

Our firm-level dataset includes overall 500 banks and more than 2 million borrowers, totaling more than 4 million bank-firm relationships. In order to control for unobservable heterogeneity through firm-time fixed effects, in our regressions we only include firms borrowing from at least two banks. This still leaves more than 2 million bank-firm relationships, given that multiple lending is particularly common in Italy across a large set of firms (Detragiache et al. 2000, Gobbi and Sette 2014), and therefore is not too restrictive of a condition. For computational reasons, when running our regressions, we select a random sample of about 20 per cent of this universe.

Table 1 displays some basic statistics on our data. The first panel shows the average changes in log credit granted over time, corresponding to the left-hand side variable that will be used in our regressions. Credit granted to all firms decreased on average in all the years under analysis. The statistics are reported for the whole of the banking sector and for some categories of intermediaries. In particular we look at banks that underwent the Comprehensive Assessment of 2014 (AQR banks) versus the remaining ones, and we also isolate mutual banks.[11] This first distinction, as we will see later, is particularly useful to try to assess the impact of exogenous variations of NPLs on credit supply.[12]

We use bank-level information on a consolidated basis from the Supervisory and Statistical Reports submitted by the intermediaries to the Bank of Italy. We gather information from both balance sheet and profit and loss accounts to build some sensible indicators of banks' structure and health. The main variables that we consider are total assets, as a proxy of size, Tier 1 Ratio to capture capitalization, Return on Equity for profitability, provisions over operating profit to assess

[10] The threshold was reduced from 75,000 to 30,000 euros in 2009. In the analysis in which we include 2008 we restrict our sample to include only loans above the initial threshold of 75,000. For analysis restricted to post-2009 periods, we keep the threshold at 30,000

[11] Mutual banks are characterized by a different business model with respect to other banks; they are local and not-for-profit cooperatives. Even if the recent legislative reform had the aim to stimulate these banks to be more integrated through the institution of a cooperative banking group, in the period under analysis these banks acted as a very different player.

[12] In the appendix other data are reported as derived from the CR, which show the patterns of three very relevant features of bank-firm relationships. They will be used in our causal analysis to take into account the specific characteristics of the matching between borrowers and lenders.

the relevance of the yearly flows of provisions on operating margins and finally the cost to income ratio as a measure of efficiency.

Table 2 shows how these variables changed over the period 2008-2015, for the aggregate of the banking sector as well as across the sample split we already used for Table 1. Clearly, average NPL ratios went up dramatically and the phenomenon was widespread across bank types. In particular, the NPL ratio almost tripled since the beginning of 2008 for AQR banks and more than tripled for other banks, including mutual banks. As a consequence, the impact of provisions over operating profit grew largely between 2008 and 2014. In particular, there was a spike in 2013 and 2014, associated with the aforementioned Asset Quality Review. The flip side of the coin was that profitability, which had declined since the beginning of the period analysed, turned negative in 2011, and again in 2013 driven by AQR banks that had been already recording losses since 2013; at the same time, coverage ratios increased, reaching an average of 45 per cent. This was not associated with a significant deleveraging process, given the continuous increase in capital. Capitalization indeed grew throughout the 8-year period. For smaller banks, it almost reached 17 per cent; for larger banks (such as the AQR ones), after a steady increase, tier 1 ratio stood at over 12 per cent by the end of 2015.

4. NPL ratios across banks and over time

We start by exploiting bank-level data to illustrate how the relation between NPLs and credit evolved in Italy over the last decade. **Figure 1** documents that the aggregate NPL ratio has been rising consistently over time. The aggregate ratio of NPLs over total credit was just around 6 per cent at the outbreak of the Lehman crisis and it grew constantly reaching almost 20 per cent over the following seven years. Credit growth to the Italian economy was negative for more than half of the period under examination (Panel A). Panel B confirms that the phenomenon is particularly pronounced for loans to firms.

To provide more informative qualitative evidence we also study heterogeneity across banks. In particular, we examine the correlation between the banks' NPL ratios measured at three specific, important dates and their subsequent performance in terms of lending and profitability. The first date we pick is the end of 2008: this provides a picture of the system in the immediate aftermath of the Lehman default, at a time when Italian banks had not yet been affected by the global financial crisis. The second snapshot is taken at the end of 2010, before Italy was hit by sovereign shocks that caused further financial market distress (Bofondi et al. 2017) and the second prolonged recession

within less than ten years. The third date is December 2015: by that time the impact of the global and sovereign shocks had fully materialized.

In the scatterplot of **Figure 2** banks' credit growth rates between 2008 and 2015 (vertical axis) are plotted against their initial NPL ratios (horizontal axis). The correlation is very low. If one separates the two sub-periods 2008-2010 and 2010-2015 (Figure 3), it becomes clear that in the first two years after the Lehman crisis the correlation between credit quality and credit growth was extremely weak and, if anything, positive rather than negative (green line). On the contrary, banks that had higher NPL ratios as of December 2010 do seem to have lent less in the following years (red line). The link remains however very tenuous leaving leeway to further investigations aimed at finding possible answers to our research question.

The relationship between initial NPLs and future credit quality does not provide a clear picture. In Figure 4 the banks are sorted on the horizontal axis based on their pre-Lehman NPL ratios and the scatterplots show how these changed between 2008 and 2015. The initial ratios, displayed in red, range from zero to just below 35 per cent. The distribution is roughly unchanged at the end of 2010 (green dots). By the end of 2015 (blue dots) the increase in NPLs is more pronounced and, more importantly, the initial ranking across banks is entirely lost: many of the banks whose initial NPLs were below 10 per cent, for instance, appear to be in the same situation as those that started with NPLs of 20 per cent or higher. This confirms that the cyclical conditions of the Italian economy – a systemic risk factor common to all banks – were an important driver of the NPLs.

To check whether banks with high NPL ratios share other common balance sheet characteristics we examine next the relation between NPL ratios and some basic balance-sheet indicators. In **Figures 5-7** we plot the correlation between NPL ratios and, respectively, the log of total assets, capital ratios and the cost to income ratio, focusing again on the three pivotal dates of end-2008, end-2010 and end-2015. Figure 5 shows that up to 2010 higher NPLs were concentrated among small banks, while by 2015 they had largely increased for all banks regardless of their size. This widespread growth is consistent with figure 4 and is another sign of the emergence of aggregate drivers of the NPLs linked to weak macroeconomic conditions. Figure 6 shows that the correlation between NPLs and capital is fairly weak and changed sign over time, with a higher concentration of NPLs in less capitalized banks at the end of our sample. Interestingly operating costs seemed to be positively correlated with credit quality at times of low NPLs, as shown in Figure 7. Although this correlation might be caused by a number of factors, one possibility is that a higher presence of bank personnel and/or higher investments in IT might make intermediaries more capable of screening and monitoring their clientele. In 2015 cost to income ratios had become much

less heterogeneous across banks with different credit quality, perhaps because the deep recession had again largely wiped off longitudinal differences in the relationship between banks' characteristics and NPL ratios.

The descriptive evidence suggests three broad remarks. First, balance sheet conditions deteriorated rapidly for most banks, with soaring NPL ratios that also affected profitability. Second, mechanisms of a prudential nature, both regulatory and self-enforced, were activated by the banks, such as raising the coverage ratio and strengthening the capital base, with the aim of increasing resilience, even at the cost of weakening current profits. Third, as we can argue from the figures, banks with high NPL ratios do not share common balance sheet characteristics. Therefore the accumulation of legacy assets across the population of banks must have been largely affected by aggregate macroeconomic conditions. These also act on the demand side of the credit market. Hence, this conclusion is also a reminder of the difficulty of identifying the supply-side effects of NPLs.

5. The impact of NPL ratios on credit supply

As we said above, correlations can be informative, but only up to a point. The co-movements between banks' NPL ratios and their contemporaneous or future economic performance, including their lending behavior, can be generated by a range of mechanisms many of which do not imply a *causal* role for the quality of the banks' portfolios. In order to move from correlation to causation we use regression analysis. We estimate a credit supply equation where NPLs feature as a potential driver of banks' lending strategies and firm-time fixed effects are used to control for changes in observed and unobserved borrower characteristics and for changes in demand. The presence of time-varying effects at the firm level is made possible by the combination of firm-level data and multiple lending relations between banks and firms and it clearly sets our analysis apart from previous studies (see Section 2).[13] We estimate the following benchmark regression:

$$\Delta Loans_{ijt} = \alpha_{jt} + \alpha_i + \gamma NPL_{i\,t-1} + \sum_k \beta_k X_{ki\,t-1} + \varepsilon_{ijt}. \qquad (1)$$

The dependent variable is the yearly (log) growth in credit granted by bank i to firm j at time t. The advantage of using a borrower-level dataset that includes multiple lending relations is that a time-varying borrower-specific effect α_{jt} can be included among the regressors to control for shifts

[13] The strategy was pioneered by Khwaja and Mian (2008).

in borrowers' characteristics, including demand. Intuitively, as long as the demand-side shocks that affect firm *j* (including for instance a drop in sales, or lack of investment opportunities) influence all of its lending relations in the same way, the fixed effect α_{jt} guarantees that their influence is removed from the data and that the remaining regressors in equation (1) capture exclusively supply-side factors. The presence of α_{jt} is thus essentially what allows us to interpret the rest of the equation as a model of the *supply* of credit. The key regressor is of course the bank-specific NPL ratio (NPL_{it-1}): if this ratio matters, banks with high NPLs should have lent less to firm *j* for any given level of borrower characteristics, leading to $\gamma<0$. The regression also includes bank fixed effects (α_i) and various bank-level controls (X_{it-1}). Our measure of NPL ratio is net of the stock of provisions.[14]

To get a better picture of the mechanism of interest, we start off with a naïve version of equation (1) that does not include bank and firm controls and we then build it up by gradually adding more information. The results are summarized in **Table 3**. The coefficient obtained from the simple, univariate OLS regression in column 1 is positive but not significant. By introducing firm fixed effects (column 2) we move to a 'within firm' type of analysis. This delivers a negative and significant coefficient which is in line with what one might expect looking at patterns in the data: for a given firm, high NPLs in the balance sheet of the lender are associated to a decline in credit which is at least consistent with NPLs discouraging bank lending. The negative coefficient in column 2 implies that the correlation between NPL ratios and credit is not entirely explained by *fixed* firm characteristics: in other words, it rules out the possibility that firms that are altogether "bad" (on account for instance of low productivity or poor management) are entirely responsible for the link between high NPLs and declining credit flows in the data. A number of possible interpretations remain open though. In particular, this specification cannot discriminate between (i) a genuine supply-side effect of the NPL ratios and (ii) a plain correlation between NPLs and credit caused by shocks that affect both banks and firms – such as those linked to the macroeconomic cycle.

We introduce firm-time fixed effects in column 3, and keep them in all subsequent specifications. Even without any additional control variable, the presence of these dummies renders the NPL ratio statistically insignificant. This means that the behavior of two hypothetical banks in our sample towards a common borrower *j* at any time *t* was not influenced by their NPL ratios. We emphasize again that it is the presence of firm-level time-varying fixed effects (and hence of a

[14] We could otherwise include the indicators of Gross NPL ratio and coverage ratio as two distinct regressors, and account separately for the impact of each. Yet we choose the more parsimonious version with just Net NPLs, as we deem that it incorporates the combined effect of credit quality and provisions. Results are robust to jointly introducing gross NPL ratios and coverage ratios.

bank-borrower level dataset) that makes it possible to draw this conclusion. This result is crucial in answering our first question. The lack of significance of the regressor in column 3 implies that the correlation between NPL ratios and credit growth in the data is driven by variations in borrower characteristics. These are likely to include changes in firms' riskiness, profitability and investment opportunities, all of which largely deteriorated over our estimation sample. Changes in demand could play an important role too. The demand for credit generally weakens in recessions, when firms have fewer investment opportunities and are more uncertain about their future. Furthermore, Alfaro et al. (2016) show that opaque and financially-constrained firms have a precautionary reason to reduce their debt in 'bad times' (i.e. when volatility is high). This means that credit demand does not change in the same way for all firms over the cycle. The number of financially-constrained firms increases in bad times. If these firms demand less credit for precautionary reasons, then the correlation between rising NPL and falling credit in column 2 might also be driven by demand factors, which are instead removed by the firm-time fixed effects included in column 3.

The remainder of table 3 shows that the conclusion is confirmed if relationship-related controls are added to the regression, i.e. if we account for some observable characteristics of the bank-firm relationships (Column 4). Interestingly, results hold also when taking into consideration bank-level time invariant heterogeneity, that is, when we plug also bank fixed effects (Column 5). This is a particularly important specification, in that it controls for the different structural features of banks, such as business models, that might have played a role in affecting bank credit supply. Column 6 presents an even more demanding specification where the usual firm-time effects are combined with bank-firm fixed effects that allow for possible unobserved non-random matching between banks and firms. The conclusion is unchanged, as NPLs ratios are again irrelevant in explaining change in granted credit.

Our descriptive statistics show that 2008-2015 was a period of rapidly changing (and mostly deteriorating) balance sheets, so it is also important to examine the relevance of other balance sheet indicators whose concurrent evolution accompanied the rise in NPL ratios. In **Table 4** we expand the specification of Table 3 to introduce observable bank characteristics such as size, capital ratio and ROE. We repeat the regression with time-invariant firm fixed effects (column 1, like column 2 of Table 3), with firm-time fixed effects (column 2, like column 3 of Table 3), and with bank fixed effects and relationship controls, to thoroughly account for structural and cyclical bank heterogeneity and bank-firm non-random matching. The results show that also when including other time-varying bank features, the NPL ratio remains insignificant (column 3, like column 5 of Table 3). Unlike the NPL ratio, bank capital is positive and significant in all three specifications. Finally, bank size enters negatively if bank fixed effects are included, suggesting that banks that have grown

'too big' (relative to their average size over the period, which is captured by the fixed effect) are relatively less willing to extend new credit. Notably, regressions without the bank fixed effects show how mutual banks' credit growth was consistently higher relative to other banks.

Before moving to the AQR analysis we briefly discuss an alternative version of table 3 where the NPL ratio is replaced by the flow of new bad loans over outstanding loans (*New Bad Loan Rate*), again lagged relative to the dependent variable. This flow variable measures the variation in the lowest-quality segment of the banks' NPLs and, as such, should capture some of the exogenous shocks that hit banks' balance sheets in our sample period. The results are reported in **Table 5**. The coefficients are qualitatively similar to those obtained in the specifications based on the NPL ratios, but the bad loan rate achieves statistical significance, albeit weak, even in some of the regressions that include firm-time effects (see column 4). This is a first indication that NPL shocks might matter even if the NPL ratio *per se* does not. However, this regressor may still be affected by an endogeneity problem. In the next section we try to exploit the Asset Quality Review to get around this problem.

6. The impact of changes in NPLs on credit supply

Even if high NPL ratios do not discourage banks from lending, an exogenous variation in these ratios may push them to change their lending policies. In this case NPLs do not constitute a drag for the credit market but their fluctuations can cause a temporary contraction in the supply of credit. To examine this possibility we adopt an 'event study' approach and study lending dynamics around the 2014 Asset Quality Review (AQR) carried out by the European Central Bank.

The AQR was part of the Comprehensive Assessment, a year-long examination of the resilience and positions of the 130 largest banks the euro area that the ECB undertook, together with national supervisors, in preparation of the launch of the Single Supervisory Mechanism (SSM). The AQR consisted in a check of the quality of the assets held at the end of 2013, based on a set of common definitions. Much of its focus laid in the analysis of the loan book, and it basically verified two aspects on a sample of loans selected from the riskiest portfolios: (i) the accuracy of loans' classification in the performing and non-performing categories; (ii) the adequacy of the related provisions, taking account of the valuations of the collateral covering the exposures. The second step of the Comprehensive Assessment was to quantify the capital strengthening measures to be taken, based on a stress test conducted with reference to a baseline and an adverse macroeconomic scenario. Fifteen Italian banks took part in the comprehensive assessment; of these, 13 now fall directly within the perimeter of the SSM.

If the balance sheet revisions associated to the AQR were at least in part (i) independent of the business cycle conditions faced by the bank borrowers in the subsequent year and (ii) unanticipated by the banks, then they can be interpreted as exogenous variations in the quality of the balance sheets and exploited to understand how (if at all) banks adjusted their lending in response to them.[15] We exploit this idea in two ways.

6.1 A difference-in-difference approach

First, we consider the whole set of Italian banks and compare the lending behavior of AQR banks to that of non-AQR banks before and after the exercise, within a *difference-in-difference* type specification.[16] As mentioned, the AQR led to an increase in provisions and requirements across the participating banks. Furthermore, the fact of being included in the review meant that these banks faced at least a non-negligible risk of having to deal with a (supervisor-driven) downward revision in the quality of their portfolios. This might have been a good enough reason to lend more conservatively. Hence, the AQR might have induced a *systematic* downward shift in credit supply for banks that were subjected to the review relative to those that were not.[17] We examine this possibility by testing whether the banks that received the "AQR treatment" displayed a different lending behavior in the aftermath of the review compared to those that did not. Defining adequate pre- and post-treatment time windows in this setup is far from trivial. We consider 2012-2013 as the pre-treatment period and 2014-2015 as the post-treatment period. The AQR was announced on October 23rd 2013, and conducted throughout 2014 based on bank-balance sheet results of end-2013. Nevertheless, since (i) the review appeared in the media well before being its official announcement, and (ii) banks tend to smooth out their balance sheet adjustments if possible, focusing on too narrow a window of a few months around the end of 2014 would be misleading.

The results are reported in **Table 6**. Our dependent variable is the log change in credit growth. Columns 1 and 2 show the simplest diff-in-diff specification, comparing the difference in growth over the two periods between the two subsamples of banks via a bank dummy (AQR bank)

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[15] Both assumptions are rather demanding. Supervisors might have taken into account the characteristics of loan portfolios following 2013, and the nature, scope and broad objective of the AQR were obviously not a surprise for the banks in any way. However, while banks used a variety of internal models, the AQR was conducted based on a shared and unique framework. This implied that supervisors had limited margins for adopting different approaches towards different banks and based most of their assessments on end 2013 balance-sheets. Furthermore, the complexity of the process and the discrepancies among models were such that banks were unlikely to be able to accurately predict the outcome of the review. The identification strategy we discuss below hinges on the presumption that there were non-negligible differences between what the banks expected and what they observed when the process ended in December 2014.

[16] The analysis is again conducted using matched bank-firm relations and firm fixed effects on the same dataset that was employed for the analysis of Tables 3-5.

[17] Moral suasion and competitive pressures might have blunted the actual difference between being inside and outside the AQR list to some extent, but it is unlikely that they made it entirely irrelevant.

and a time dummy (post AQR). The positive coefficient in column 1 reveals that lending was on average higher for AQR banks and this differential pattern continued after the supervisory exercise, even when we take into account systematic bank differences by including bank fixed effects (column 2). Column 3 and 4 allow to gauge whether heterogeneity in NPL ratios induced banks to adjust their credit supply differently after the review took place. Interestingly, AQR banks still appear to have lent at higher rates on average (column 3), but not more intensely in the AQR period, as the interaction between the time and the bank dummy shows (columns 3 and 4). NPLs *per se* do not weaken lending growth; in fact, NPL ratios have a puzzling positive coefficient. Nevertheless, the negative interaction between NPL ratios and AQR dummy shows that AQR banks that had a higher share of non-performing exposures lent on average relatively less, supporting the case of a differentiated behavior across AQR banks based on their initial credit quality. As shown by the triple interaction in column 4, after the revisions induced by the AQR, though, the impact of NPL ratios *within AQR banks* seems mitigated. A possible interpretation for this is the improvement in transparency and confidence yielded by the review; however many other factors, including a relative improvement in macroeconomic conditions, could have played a role too.

The diff-in-diff specification suggests that the relation between NPL ratios and credit is not clear-cut; in most cases the share of non-performing loans becomes insignificant once demand and bank-level characteristics are properly accounted for, in line with the results in Section 5. At the same time Table 6 suggests that the AQR subsample contains a great deal of heterogeneity, which is precisely what we exploit in the next subsection.

6.2 An IV approach

The second step in our exploration of the AQR aims at identifying the impact on credit supply of an exogenous variation in NPLs. The focus of the analysis therefore shifts to two measures of *changes* in credit quality: the flow of provisions over operating profits (*Provisions/Operating Profits*) and the flow of new NPLs over total outstanding loans (*NewDefault rate*). Since we are after the effect of a variation in credit quality, these flow measures are more informative than the underlying NPL ratios.

The revisions in banks' balance sheets related to the AQR exercise provide a valuable instrument for the change in credit quality recorded in 2014-15. For the 15 Italian banking groups that were subjected to the AQR we use both reclassifications from performing to non-performing portfolios and additional provisions set aside as a result of the review. These figures allow us to

build our two instruments: two measures of (AQR-related) changes in provisions and in NPL ratios.[18] We use the two following specifications:

$$\Delta Loans_{ij} = \alpha_j + \gamma\, \widehat{Provisions/Operating\ profits}_i + \beta' X_i + \varepsilon_{ij}$$

$$\Delta Loans_{ij} = \alpha_j + \gamma \widehat{NewDefault}\ rate_i + \beta' X_i + \varepsilon_{ij} \qquad (2)$$

The dependent variable is the log change in credit granted by bank *i* to borrower *j* between 2013 and 2014 and between 2014 and 2015. The key regressors are, alternatively, the flow of provisions over operating profits that took place in 2014-15 (*Provisions/Operating Profits*), and the flow of new NPL over total outstanding loans (*NewDefault rate*). Both indicators measure by how much credit quality deteriorated in the period under analysis in banks' balance sheets. Exploiting our loan-level dataset, we again introduce a set of firm fixed effects (α_j) that capture the overall change in credit for each borrower over the period of interest. These are effectively the static version of the firm-time fixed effects used in the regressions of Section 5. As in the previous case, they are extremely important for identification because they allow us to focus on the differences between banks that were lending to the same firm. The lagged net NPL ratio is included in the controls (*X*) in all specifications.

We analyze *Provisions/Operating Profits* first. In order to focus on its exogenous variation we instrument the regressor using alternatively two of the official outcomes of the AQR, namely (i) provisions, expressed in basis points or as share of total assets, and (ii) variations in NPL ratios associated with the reclassifications of loans to non-performing categories. The results are reported in **Table 7**. The regressions are estimated both with and without bank characteristics and include the usual set of relationship controls. The coefficient of interest is negative and significant in four specifications out of six (see columns 3 to 6). This suggests that the negative adjustments that banks had to make after the AQR did have a negative impact on lending.

In **Table 8** we replicate the analysis using the *New Default rate* as a regressor instead of the ratio of provisions to profits and instrumenting it with the variations in provisions and the variations in NPL ratios brought about by the supervisory revision. As in the previous case, the exogenous

[18] The validity of our instruments is confirmed by the first stage of the 2SLS estimation. All three instruments (AQR provisions in basis points, AQR provisions over total assets, and AQR-related NPL ratio change) appear to be well correlated with two endogenous variables (Provisions over Operating profits and New Default rate). The F test of excluded instruments is always way higher than threshold levels for not having weak instruments (Angrist and Pischke, 2009).

variation in default rates – as captured by the IV strategy – has a broad negative impact on credit growth in four out of six specifications.

7. Discussion of the results

The instrumental variable estimates discussed in Subsection 6.2 suggest that exogenous shocks to the banks NPL ratios can indeed have a negative impact on credit supply. The opposite conclusion would be very surprising. If and when they occur in a genuine *ceteris paribus* setup – i.e. holding fixed banks' coverage and capital ratios, their lending opportunities, etc. – NPL shocks indeed are intuitively similar to other negative "exogenous" shocks that impair capitalization, liquidity or profitability. These shocks have been documented in the literature to be relevant for credit supply, and assessing their specific repercussions is beyond the specific focus of our paper[19]; our analysis shows that exogenous shocks to credit quality go in the same direction. At the same time, the regressions with firm-time fixed effects presented in Section 5.1 show that the link between NPL ratios and credit growth in the data becomes very tenuous (in fact non-existent) if the specification is rich enough to control properly for changes in observed and unobserved borrower conditions. This finding is a signal that a decline in firms' profitability, investment opportunities and demand for credit might be the key common factors behind both the rise in NPLs and the drop in credit flows. Demand might have played an important role too. At times of high economic uncertainty, firms are known to invest less, which causes a decrease in their need for external funding. Furthermore, firms that are exposed to the risk of losing access to credit markets voluntarily engage in deleveraging with the aim of enhancing their resilience to adverse idiosyncratic shocks.[20]

Taken together, this evidence suggests that, although important in principle, exogenous NPL shocks must have played in practice a relatively minor role in Italy over the last decade. If the NPL ratios had been fluctuating under the influence of exogenous shocks to the banks' balance sheets (as those associated to the AQR), then based on the IV results we would expect them to be a significant driver of bank lending in our full-sample regressions. Clearly, that is not the case. A corollary of this conclusion is that the NPL ratio *in and of itself* is unlikely to constitute a problem. Banks are

[19] See e.g. Peek and Rosengren (2000), Khwaja and Mian (2008), Peydrò (2010) and Mora and Logan (2012). Although we do not identify specific shocks to capital or profitability, we use these balance sheet indicators as bank-level controls and find that the Tier 1 ratio has a positive effect on credit even after controlling for time-varying firm characteristics (see table 4). This confirms that capital is a relevant driver of bank lending in our sample too, as predicted by this strand of research.

[20] Alfaro et al. (2016).

equipped to deal with non-performing exposures, and in a static situation (i.e. barring shocks) the ratio would not snuff credit out irrespective of its level.

Finally, our diff-in-diff analysis of the AQR can be read as a way of checking what was the relevance of genuine NPL shocks, or more generally the relative role of supply and demand factors, in the delicate transition faced by the Italian economy between 2012 and 2014. Our results show that, despite the causal effects revealed by the IV estimates, the AQR did not, all in all, decrease the supply of bank credit. The negative impact of the review on the key balance sheet items, including non-performing exposures, must have been quantitatively limited and more than compensated by the positive impact of higher confidence and transparency.

We focus on the intensive margin of credit. NPLs might of course also influence credit supply along other dimensions, for instance making loans more expensive or causing rationing problems. Although it seems unlikely that these would vary leaving credit quantities unchanged, a more thorough investigation of these possibilities would certainly be a worthwhile extension of our work.

Where does this leave the debate on NPLs? If (i) the correlation between NPL ratios and credit flows is largely endogenous, and (ii) the ratios only really 'matter' when they fluctuate for exogenous reasons, it follows that any statement on whether or not NPLs constitute a problem should be made conditional on a clear identification strategy and a reliable estimate of the nature and size of the shocks faced by banks. Our empirical results do not extend of course to other economies, nor necessarily to different historical episodes, but they clearly illustrate the crucial role of identification in making causal statements on the relation between NPLs and credit dynamics

8. Conclusions

The steep increase in non-performing bank loans (NPLs) that took place after the financial crises of 2008-2011 has brought the problem of 'legacy assets' to the center of the European policy debate. If a decline in the quality of the loans discourages bank lending, the rise in NPLs observed since 2008 might have played an important role in depriving European economies of much-needed credit, making the recovery from the crisis harder than elsewhere. The case of Italy is an interesting one to test this possibility: between 2008 and 2015 the aggregate NPL ratio of Italian banks doubled, credit shrunk, and the country – where the structural relations between banks and firms are notoriously strong – experienced two distinct recessions.

To investigate the linkage between NPLs and the supply of bank credit, we construct a rich dataset that includes the universe of Italian banks and the evolution of their lending relations with 2.5 million borrowers over the last 8 years. The availability of loan-level information from the Italian Credit Register allows us to control thoroughly for changes in the demand for credit: in particular, we can zoom in on firms that were borrowing from more than one bank at once and check whether they systematically obtained less funds from lenders that were burdened by a higher NPL ratio. We also exploit for identification purposes the Asset Quality Review (AQR) carried out by the European Central Bank in close cooperation with supervisory authorities in 2014. Supervisors forced a number of adjustments to bank balance sheets which, being out of the control of the banks, can be seen as an "exogenous" source of variation in NPLs.

We find that, although exogenous shocks to NPLs can indeed cause a decline in credit supply, the correlation between NPLs and credit in our data is almost entirely driven by demand-side effects. Once these are accounted for, NPL ratios have no discernible influence on banks' lending strategies. Our analysis also suggests that the overall impact of the AQR on bank lending was positive rather than negative. At the margin, the revisions in write-downs and NPLs imposed by the supervisors were bad news for both banks and borrowers; but bank lending rose in aggregate terms after 2014, possibly on account of the decrease in uncertainty generated by the evaluation exercise.

In the current conjuncture improving resilience and rebuilding confidence in the banking sector remains a critical policy objective, both in Italy and elsewhere. Addressing legacy assets is an important part of this process. However, our work suggests that NPLs are an easy but unlikely culprit for the weak credit flows observed in the past years, and that their role in shaping bank behavior might be easily overestimated. Our results also suggest that forcing banks to liquidate NPLs may not be the best option to kick-start credit. It might even be counterproductive; if the liquidation of the NPLs generates losses that are large enough to reduce the banks' capital ratios, then, given that NPLs do not seem to matter while capital certainly does, the net impact of the sale on credit supply might be negative rather than positive.

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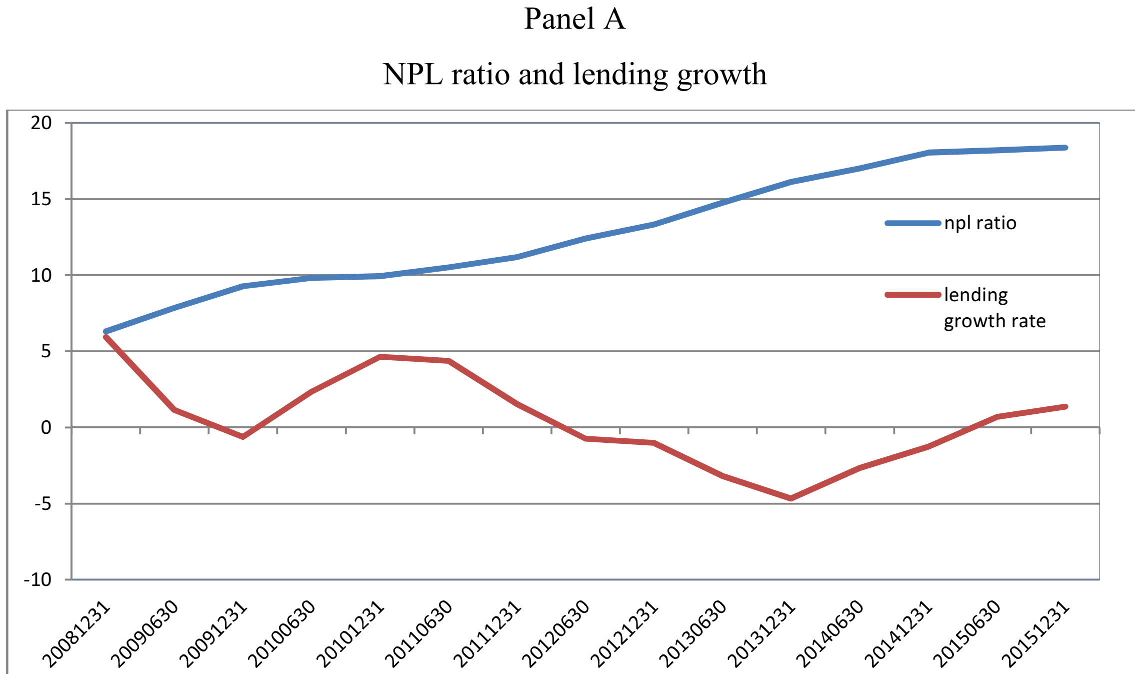
Figures and Tables

Figure 1: Aggregate NPL ratio, new NPL rate and lending growth, 2008-2015.

Panel A

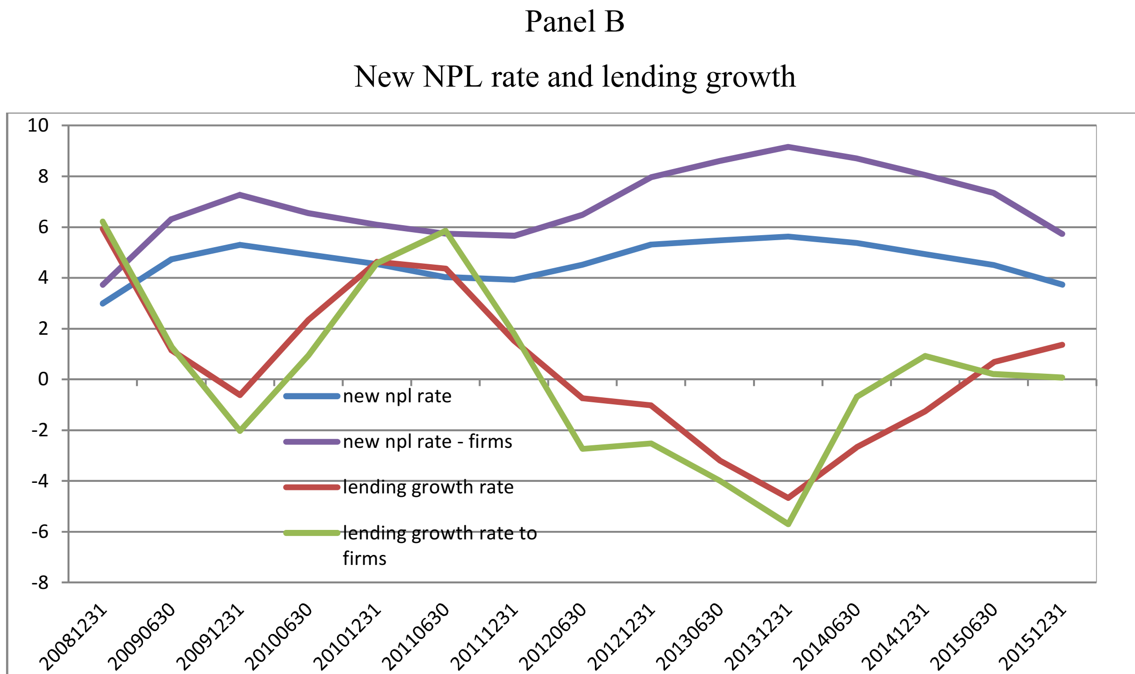
NPL ratio and lending growth



This figure shows the negative correlation between the aggregate NPL ratio and the lending growth.
The blue line plots the NPL ratio; the red line plots the lending growth ratio.

Panel B

New NPL rate and lending growth



This figure plots shows the negative correlation between the annualized flow of new NPLs over total loans (New NPL rate) and the lending growth. The blue line plots the new NPL ratio; the purple line plots the new NPL ratio to firms; the red line plots the lending growth ratio; the green line plots the lending growth rate to firms.

Figure 2: Growth rates of credit over the period 2008-15 for their initial NPL ratios.

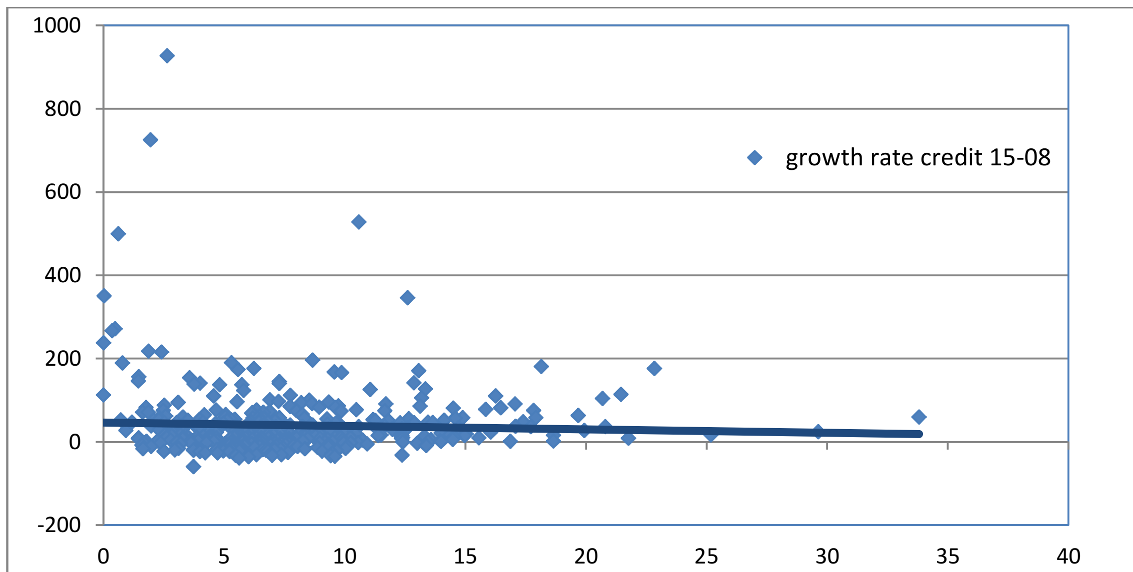


Figure 2 plots banks' credit growth rates between 2008 and 2015 (vertical axis) are plotted against their initial NPL ratios (horizontal axis). The blue line plots the trend-line.

Figure 3: Growth rates of credit over the period 2008-2010 and 2010-15 for different initial NPL ratios 2008 and 2010.

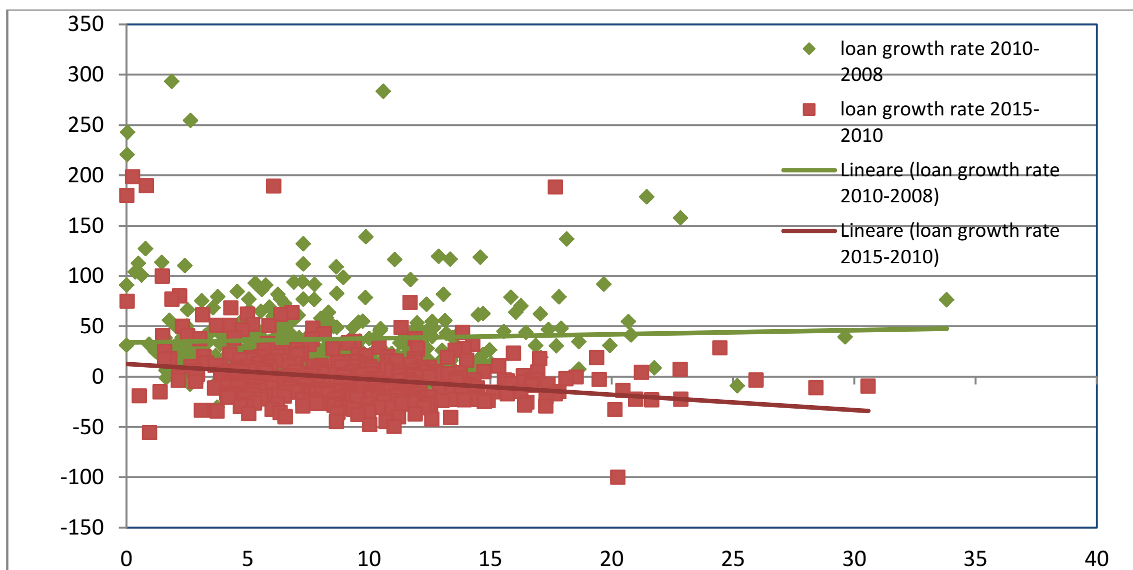


Figure 3 plots banks' credit growth rates between 2008 and 2010 - vertical axis - are plotted against their initial NPL ratios - horizontal axis (green items); banks' credit growth rates between 2010 and 2015 - vertical axis - are plotted against their initial NPL ratios - horizontal axis (red items). The green line plots the trend-line for the subsample 2008-2010; the red line plots the trend-line for the subsample 2010-2015.

Figure 4: Bank level NPL ratio in 2008, 2010 and 2015.

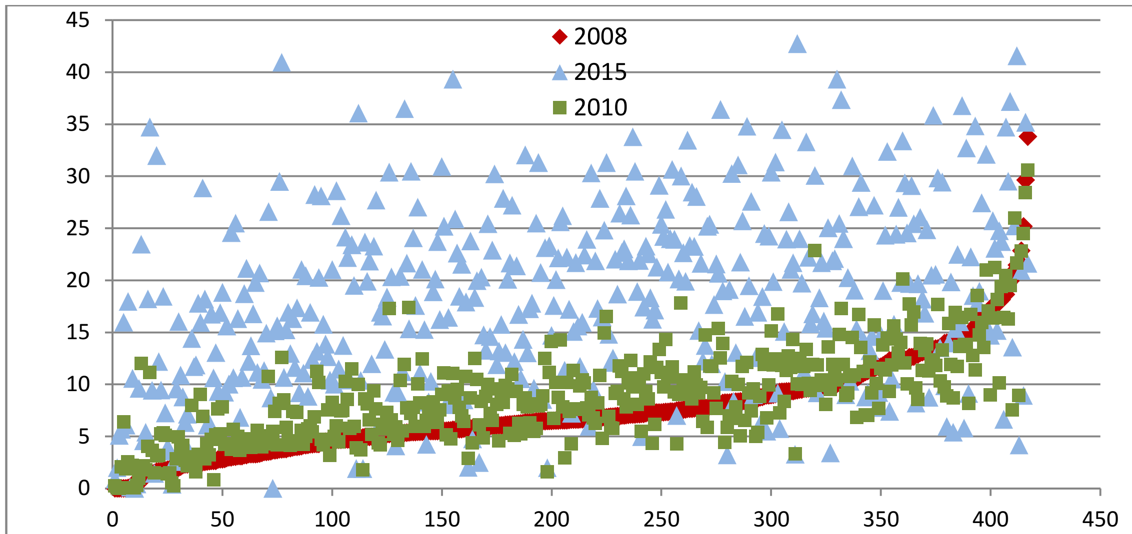


Figure 4 plots banks sorted on the horizontal axis based on their pre-Lehman NPL ratios and show how these ratios changed between 2008 and 2015. The initial ratios are displayed in red (2008); the 2010 observations are pictured in green and the 2015 in blue.

Figure 5: Correlation between NPL ratios and total assets at end 2008, 2010, 2015.

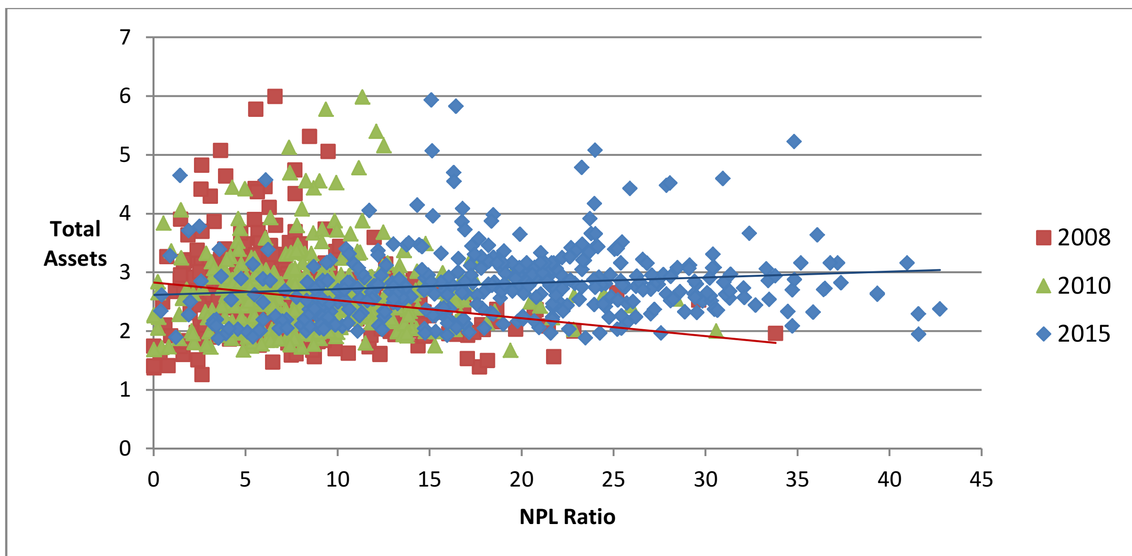


Figure 5 plots the correlation between NPL ratio (x-axis) and the log of total assets (y-axis) at the three dates of December 2008 (red items), December 2010 (green items); December 2015 (blue items). The red line plots the trend-line for the subsample 2008; the blue line plots the trend-line for the subsample 2015.

Figure 6: Correlation between NPL ratios and capital ratios at end 2008, 2010, 2015.

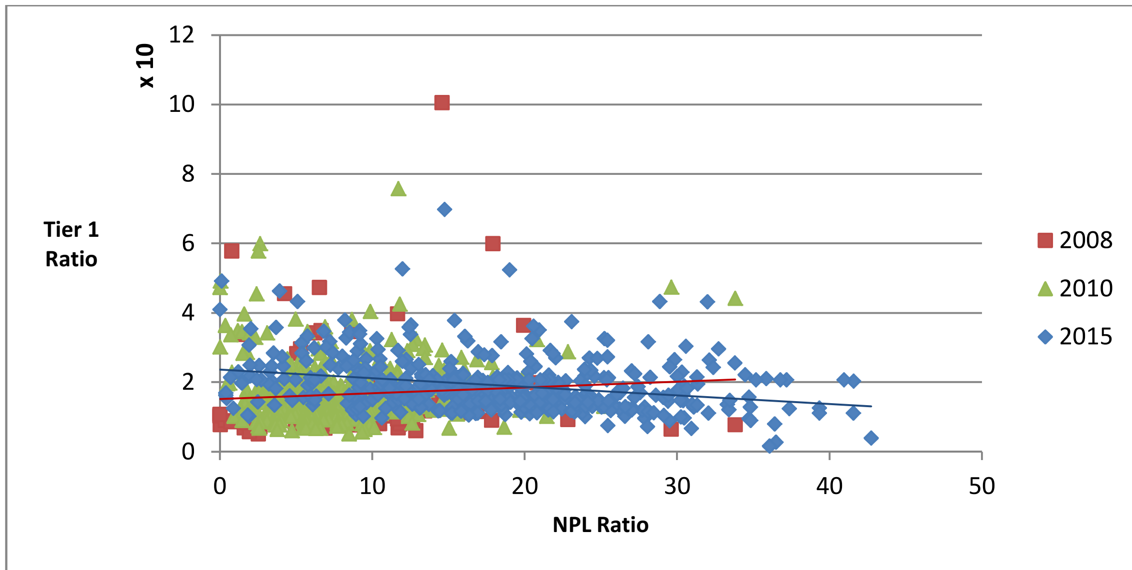


Figure 6 plots the correlation between NPL ratio (x-axis) and the tier 1 ratio (y-axis) at the three dates of December 2008 (red items), December 2010 (green items); December 2015 (blue items). The red line plots the trend-line for the subsample 2008; the blue line plots the trend-line for the subsample 2015.

Figure 7: Correlation between NPL ratios and the cost-income ratio at end 2008, 2010, 2015.

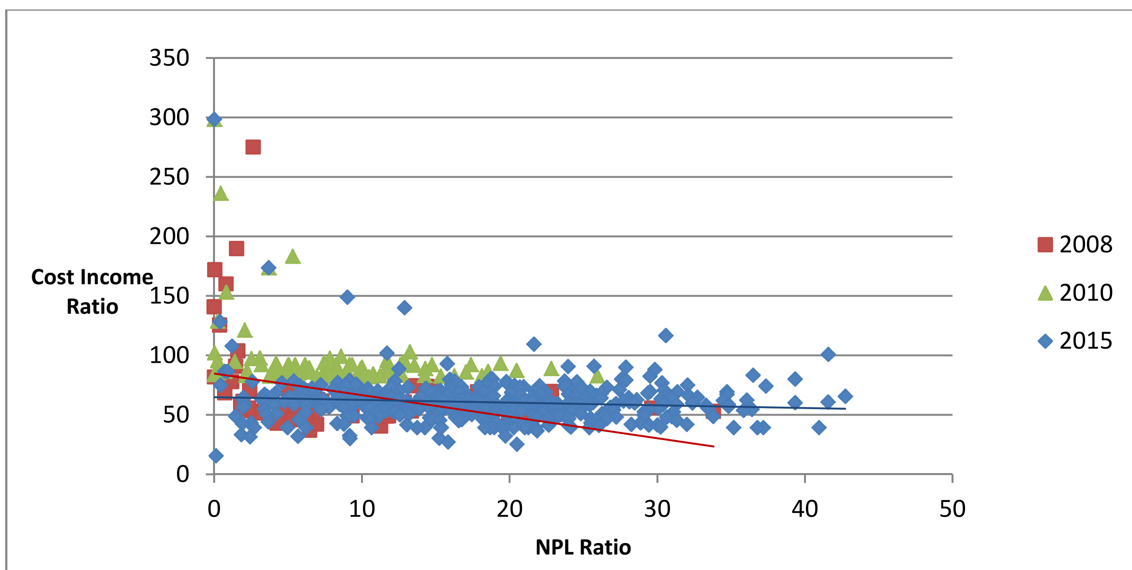


Figure 9 plots the correlation between NPL ratio (x-axis) and the cost income ratio (y-axis) at the three dates of December 2008 (red items), December 2010 (green items); December 2015 (blue items). The red line plots the trend-line for the subsample 2008; the blue line plots the trend-line for the subsample 2015.

Table 1: Basic statistics on CR data for some categories of intermediaries*

Delta of log Credit Granted

DATE	All banks	*of which: AQR Banks*	*of which: non-AQR Banks*	*of which: Mutual banks*
2008	-0.6	-1.5	1.3	3.0
2009	-3.3	-3.8	-2.3	0.9
2010	-1.4	-0.9	-2.2	-0.6
2011	-5.4	-5.8	-4.5	-2.9
2012	-7.2	-7.0	-7.6	-6.5
2013	-5.9	-6.0	-5.6	-4.0
2014	-2.1	-1.3	-3.6	-2.1
2015	-1.5	-0.9	-2.4	-1.0

*: Source: Bank of Italy, Credit Register (CR).

The panel shows the averages delta variation of credit over time.

Table 2: Bank characteristics*

All banks

[millions of euros and per cent]

DATE	*NPL ratio*	*Coverage ratio*	*Total assets*	*T1 ratio*	*Leverage ratio*	*Cost-income ratio*	*Loan loss provisions to operating profit*	*RoE*
2008	6.1	45.0	6,636	7.6	6.9	66.6	48.1	5.0
2009	9.0	39.5	6,836	8.9	7.1	61.7	60.4	4.1
2010	9.8	39.7	6,918	9.3	7.3	65.4	59.8	3.9
2011	11.0	39.8	6,964	10.1	7.5	67.6	66.6	-10.2
2012	13.2	39.3	7,138	11.1	7.1	60.9	80.4	-0.2
2013	15.9	41.7	6,725	11.1	7.1	65.7	128.8	-9.4
2014	17.7	44.5	6,706	12.3	7.1	62.0	102.1	-2.1
2015	18.1	45.4	6,696	12.7	7.2	63.7	70.3	2.7

of which

AQR banks

[millions of euros and per cent]

DATE	*NPL ratio*	*Coverage ratio*	*Total assets*	*T1 ratio*	*Leverage ratio*	*Cost-income ratio*	*Loan loss provisions to operating profit*	*RoE*
2008	6.3	46.1	158,367	6.9	6.6	66.9	50.0	5.2
2009	9.5	40.1	162,523	8.3	6.8	60.9	62.5	4.4
2010	10.1	40.4	166,710	8.8	7.0	64.7	60.5	4.3
2011	11.4	40.5	167,514	9.7	7.2	67.9	70.2	-13.9
2012	13.5	40.0	170,980	10.8	6.9	60.5	82.9	-0.9
2013	16.4	42.8	159,714	10.5	6.8	67.7	147.0	-12.8
2014	18.3	45.2	157,863	11.7	6.9	63.6	111.9	-3.6
2015	18.5	45.5	158,582	12.2	7.0	64.8	67.5	3.0

of which

non-AQR banks

[millions of euros and per cent]

DATE	*NPL ratio*	*Coverage ratio*	*Total assets*	*T1 ratio*	*Leverage ratio*	*Cost-income ratio*	*Loan loss provisions to operating profit*	*RoE*
2008	5.5	39.7	1,268	10.4	8.5	65.5	41.4	4.5
2009	7.3	36.7	1,392	10.9	8.3	64.9	50.8	3.2
2010	8.5	36.8	1,382	11.2	8.7	68.2	56.8	2.2
2011	9.7	36.8	1,440	11.5	8.6	66.5	54.4	2.5
2012	12.1	36.4	1,540	12.0	8.1	62.0	71.4	2.1
2013	14.2	37.4	1,533	12.9	7.8	59.3	82.5	0.9
2014	15.8	41.6	1,576	14.0	8.0	57.6	78.6	2.2
2015	16.8	44.9	1,576	14.5	8.2	60.3	77.7	1.7

of which

MUTUAL banks

[millions of euros and per cent]

DATE	*NPL ratio*	*Coverage ratio*	*Total assets*	*T1 ratio*	*Leverage ratio*	*Cost-income ratio*	*Loan loss provisions to operating profit*	*RoE*
2008	6.6	25.1	456	14.1	11.1	60.3	26.2	6.4
2009	8.0	24.0	495	14.5	10.9	68.3	43.3	3.8
2010	8.8	24.1	518	14.5	10.7	71.2	49.3	2.1
2011	10.3	24.8	545	14.3	10.3	68.1	55.5	2.0
2012	13.3	25.5	605	14.4	9.6	59.3	70.1	2.5
2013	16.1	30.5	638	14.7	9.1	57.4	91.3	0.5
2014	17.7	36.1	678	16.4	8.4	51.4	80.4	1.9
2015	19.1	39.8	670	16.8	8.5	56.5	88.9	-0.1

*: Source: Bank of Italy, supervisory reports.

NPL ratio is the ratio of non-performing loans to total loans. *Coverage ratio* is the ratio of loan loss provisions to non-performing loans. *Total assets* is an average value in millions of euros. *T1 ratio* is the ratio of tier 1 capital to risk-weighted assets. *Leverage ratio* is the ratio of equity to total assets. *Cost-income ratio* is the ratio of operational expenses to gross income. *Loan loss provisions to operating profit* is the ratio of loan loss provisions to income net of operating expenses. *RoE* is the ratio of net profit to equity.

Table 3: Net NPL ratio

VARIABLES	(1) No fixed effects	(2) Firm fixed effects	(3) Firm*time Fixed effects	(4) Firm*time FE Relationship ctrls	(5) Firm*time FE Relationship ctrls Bank fixed effects	(6) Firm*time FE Relationship ctrls Bank*firm fixed effects
Net NPL ratio	0.0741	-0.287***	0.0282	-0.0605	-0.0650	-0.206
	(0.0667)	(0.0735)	(0.0759)	(0.0770)	(0.129)	(0.133)
Drawn over granted				-0.0162***	-0.0113***	-0.00584
				(0.00348)	(0.00267)	(0.00478)
Share of Overdraft				0.0999***	0.0929***	0.199***
				(0.00432)	(0.00357)	(0.00925)
Share of Total Granted				-0.308***	-0.323***	-1.898***
				(0.0135)	(0.0125)	(0.0272)
Constant	-4.203***					
	(0.530)					
Observations	911174	910124	897844	897844	897841	845230
R-squared	0.000	0.092	0.351	0.374	0.376	0.579

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Net NPL ratio and balance sheet variables

VARIABLES	(1) Firm fixed effects	(2) Firm*time Fixed effects	(3) Firm*time FE Relationship ctrls Bank fixed effects
Net NPL ratio	-0.296***	0.00208	-0.130
	(0.0923)	(0.0825)	(0.110)
Bank size	0.0734	0.107	-2.250*
	(0.0915)	(0.0779)	(1.336)
Tier 1 ratio	-0.103	0.180***	0.513***
	(0.0818)	(0.0520)	(0.0701)
Return on Equity	0.102***	-0.0134	-0.00782
	(0.0293)	(0.0233)	(0.0238)
Writedowns/offs over operprofits (lag)	1.202***	0.0565	0.241
	(0.333)	(0.172)	(0.268)
Mutual Bank dummy	3.116***	1.900***	
	(0.556)	(0.502)	
Drawn over granted			-0.0113***
			(0.00263)
Share of Overdraft			0.0927***
			(0.00357)
Share of Total Granted			-0.323***
			(0.0124)
Constant			
Observations	909983	897666	897725
R-squared	0.093	0.352	0.377

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5: New bad loan rate

VARIABLES	(1) No fixed effects	(2) Firm fixed effects	(3) Firm*time Fixed effects	(4) Firm*time FE Relationship ctrls	(5) Firm*time FE Relationship ctrls Bank fixed effects	(6) Firm*time FE Relationship ctrls Bank*firm fixed effects
New Bad Loan Rate	0.278	-0.541***	-0.0955	-0.368*	-0.281	-0.0246
	(0.183)	(0.185)	(0.166)	(0.195)	(0.187)	(0.154)
Drawn over granted				-0.0167***	-0.0113***	-0.00576
				(0.00352)	(0.00269)	(0.00481)
Share of Overdraft				0.1000***	0.0929***	0.200***
				(0.00431)	(0.00356)	(0.00923)
Share of Total Granted				-0.309***	-0.324***	-1.898***
				(0.0134)	(0.0124)	(0.0273)
Constant	-4.402***					
	(0.512)					
Observations	910274	909188	896492	896492	896490	843790
R-squared	0.000	0.092	0.351	0.374	0.376	0.579

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: AQR and non-AQR banks

VARIABLES	(1)	(2)	(3)	(4)
AQR bank	5.343***		12.12***	
	(1.543)		(4.032)	
AQR bank * post AQR	8.702***	8.911***	4.110	0.905
	(2.738)	(2.785)	(5.796)	(6.848)
NPL ratio			0.151	0.779**
			(0.205)	(0.379)
Npl ratio * post AQR			-0.115	-0.253
			(0.161)	(0.197)
Npl ratio * AQR bank			-0.977**	-3.109**
			(0.493)	(1.513)
Npl ratio * AQR bank * post AQR			0.713	1.679*
			(0.651)	(0.943)
Relationship level controls	yes	yes	yes	yes
Firm*Time fixed effects	yes	yes	yes	yes
Bank fixed effects	no	yes	no	yes
Observations	633978	633968	595319	595316
R-squared	0.423	0.429	0.429	0.433

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7: AQR variables used as instruments for provisions

	Provisions over operating profits instrumented by					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	AQR-provisions (basis points)	AQR-provisions (basis points)	AQR-provisions (over total assets)	AQR-provisions (over total assets)	AQR-delta NPL	AQR-delta NPL
Provisions over operating profits	-3.993	-178.3	-5.572***	-11.28*	-7.710***	-10.37***
	(2.881)	(2142)	(1.619)	(5.457)	(1.218)	(2.065)
Bank size		-78.16		-2.939		-0.641
		(957.7)		(2.381)		(1.417)
Tier 1 ratio		6.113		1.481***		0.714
		(59.34)		(0.301)		(0.583)
Return on Equity		-6.329		-0.357*		-0.307***
		(76.56)		(0.199)		(0.0910)
Net NPL ratio		5.130		0.531**		0.212
		(61.97)		(0.192)		(0.185)
Bank balance sheet variables	no	yes	no	yes	no	yes
Firm time fixed effects	yes	yes	yes	yes	yes	yes
Relationship level controls	yes	yes	yes	yes	yes	yes
Observations	157001	157001	157001	157001	157001	157001
R-squared	0.462	-0.632	0.462	0.462	0.462	0.463

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8: AQR variables used as instruments for new default rate

	New default rate instrumented by					
VARIABLES	(1) AQR-provisions (basis points)	(2) AQR-provisions (basis points)	(3) AQR-provisions (over total assets)	(4) AQR-provisions (over total assets)	(5) AQR-delta NPL	(6) AQR-delta NPL
New default rate	-0.827	-1.917	-1.233***	-1.596***	-1.713***	-2.330***
	(0.588)	(1.369)	(0.367)	(0.510)	(0.338)	(0.358)
Bank size		2.625***		2.544***		2.730***
		(0.632)		(0.478)		(0.549)
Tier 1 ratio		-0.591		-0.296		-0.970
		(1.309)		(0.598)		(0.554)
Return on Equity		0.171*		0.150***		0.198***
		(0.0942)		(0.0425)		(0.0436)
Net NPL ratio		0.652		0.580**		0.745***
		(0.373)		(0.204)		(0.171)
Bank balance sheet variables	no	yes	no	yes	no	yes
Firm time fixed effects	yes	yes	yes	yes	yes	yes
Relationship level controls	yes	yes	yes	yes	yes	yes
Observations	157001	157001	157001	157001	157001	157001
R-squared	0.461	0.463	0.462	0.463	0.462	0.462

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Appendix

Panel 1*

Average Share of Total Credit from each Bank

DATE	All banks	*of which: AQR Banks*	*of which: non-AQR Banks*	*of which: Mutual banks*
2008	31.4	31.8	30.5	34.2
2009	34.9	35.0	34.7	38.9
2010	35.1	35.2	34.9	39.0
2011	34.8	34.8	34.9	39.1
2012	34.7	34.7	34.5	38.9
2013	34.6	34.7	34.6	39.1
2014	34.7	34.9	34.2	38.9
2015	34.6	35.0	33.9	38.8

Panel 2*

Drawn Credit over Granted Credit

DATE	All banks	*of which: AQR Banks*	*of which: non-AQR Banks*	*of which: Mutual banks*
2008	71.8	76.4	62.6	60.8
2009	67.8	70.0	63.8	61.8
2010	68.3	69.9	65.3	63.6
2011	68.8	69.5	67.5	66.1
2012	72.8	75.3	68.3	67.3
2013	69.6	70.9	67.5	66.4
2014	90.1	103.6	66.3	65.4
2015	69.4	71.7	65.3	64.2

Panel 3*

Share of Overdraft over Granted Credit

DATE	All banks	*of which: AQR Banks*	*of which: non-AQR Banks*	*of which: Mutual banks*
2008	26.4	25.7	27.8	32.2
2009	26.5	26.0	27.4	30.6
2010	25.3	24.7	26.5	29.4
2011	25.5	25.1	26.4	28.4
2012	26.2	25.8	26.8	28.8
2013	25.9	25.7	26.2	28.1
2014	24.5	24.2	25.2	26.8
2015	23.2	22.8	23.8	25.2

*: Source: Bank of Italy, Credit Register (CR).

Panels 1-3 show the average values of three very relevant features of bank-firm relationship, the share of the total credit that a firm obtained from a given bank (Panel 1); the ratio of drawn credit over committed credit (Panel 2); the share of overdraft debt that a given borrower has towards each lender (Panel 3).