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The Italian NPLs market

UniCredit case study

Supervisor
Prof. Veller Andrea

Second Supervisor
Prof. Rigoni Ugo

Graduand
Luca Cauda
Matriculation Number 837414

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Summary

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List of Abbreviations

AMC	asset management company
AuM	asset under Management
bp	basis point
bn	billion
BRRD	Bank recovery and resolution directive
CET1	common equity tier 1
CoE	cost of equity
CRR	capital requiements regulation
EBA	European Banking Authority
ECB	European Central Bank
EL	expected loss
FBE	forborne exposure(s)
FBL	forborne loan(s)
GDP	gross domestic product
IFRS	International Financial Reporting Standard
IMF	International Monetary Fund
KPI	key performance indicator(s)
LCR	liquidity coverage ratio
NFC	non financial corporate(s)
NPE	non-performing exposure(s)
NPL	non-performing loan(s)
PD	probability of default
pp	percentage point(s)
P&L	profit and loss
RAQ	risk Assessment questionnaire

REA	risk exposure amount
RoA	return on asset
RoE	return on equity
SME	small and medium-sized enterprises
SREP	Supervisory review and evaluation process
(T)LTRO	(targeted) long-term refinincing operation

1. Introduction

The Non-performing exposure's theme is not a new issue for the banking system. The first attempt to address this topic was at the end of the 80s, with the creation of a market for the disposal of non-performing loans in the US. The problem affected also Japan during the 90s, and, in 2007/2008, after the explosion of the financial crisis, was the turn of Europe.

The 2007 financial crisis, focus the attention of banks, National and International Regulators and investors on the financial institutions' asset quality, which today reflects the damages suffered by the global credit system. This event changed the strategic priorities of financial intermediaries, today much more focused on the asset de-risking and de-leveraging, with the aim of increasing their solidity and following the International Regulators' requirements.

Despite this work does not provide an analysis of the financial crisis, it would be impossible not to consider its economic effects on the banks' balance sheets, and the implications on the credit quality deterioration, that started in 2007. The graph below shows the European banking aid to the European banking systems in the early years of the financial crisis[1]. As we can see, the Italian banking system received limited aid compared to the others in the Eurozone, demonstrating how, at the beginning it has been hit less by the crisis. The reason is the low level of Italian banks' exposure to the capital markets and the prevalence of commercial credit (retail, corporate and institutions) in respect of the investments in securities, as a percentage of banks' assets.

[1] The numbers in the graph refers to the early years after the financial crisis and therefore ignores deliberately the new financial aids recently approved by the European Commission for the rescue of Banca Popolare di Vicenza and Veneto Banca.

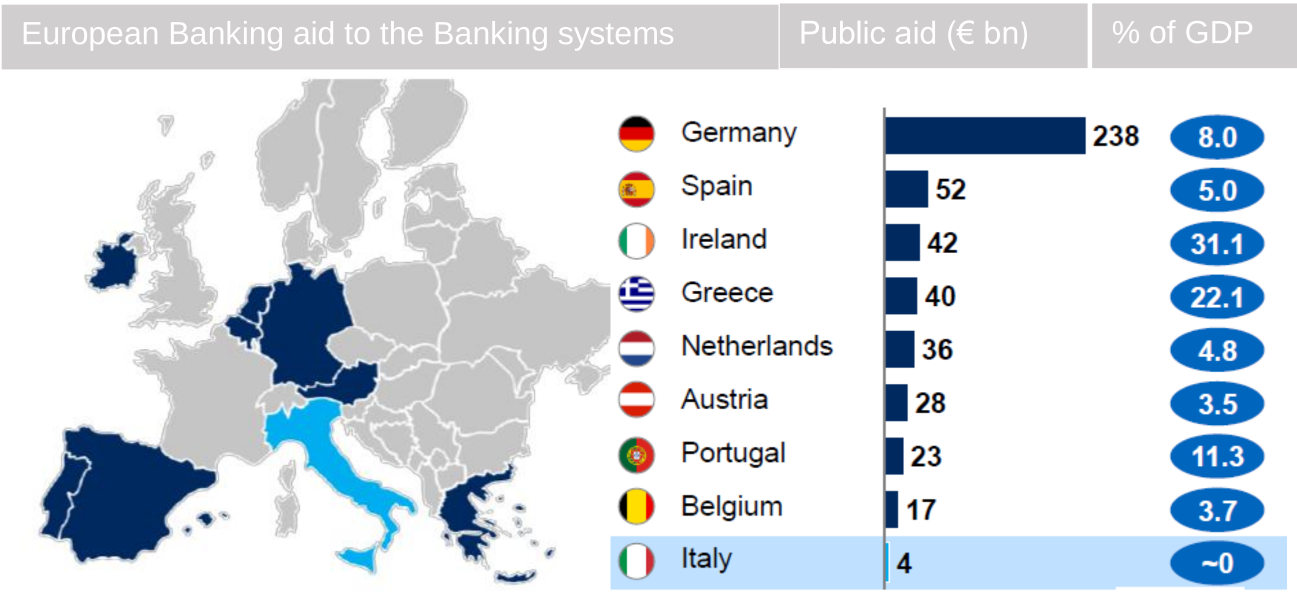

Figure 1: European Banking aids, (Banca IFIS Area NPL, "Fill the gap, NPL meeting", Venice 16th September 2016)

The biggest global financial crisis since 1929 hit Italian economic system through the transmission to the real economy, which generates a significant drop in banks' profitability and the deterioration of credits' portfolios. Debtors which were previously considered able to repay their financial obligations, could not be rated solvents anymore due to the deterioration of their financial holdings. The immediate consequence was the change of status of loans moving from the performing status to the non-performing one. The result is the rise of a huge level of gross non-performing exposures that reached €349 billion in December 2016, about four times higher than 2008 [(2)]; 61% of the total amount of NPE, c. €215 billion, are non-performing loans. At the end of 2016, the non-performing exposures weighted banks' balance sheets, counting for the 9.45%[3] of the total gross loans to customers.

The solution to this issue cannot be further postponed; non-performing exposures drain liquidity, erode profits and destroy values, limiting the possibility for banks to grant credit to families, firms and institutions. During last years, in a macroeconomic scenario characterized by low interest rates that heavily reduced revenues, Italian banks tried to bypass the problem through cost-cutting, closing branches and laying off thousands of employees to increase their net interest income and return to be profitable. The main

[2] Banca d'Italia, rapporto stabilità finanziaria 2017.
[3] Banca d'Italia, rapporto stabilità finanziaria 2017.

instrument to achieve the desired target is to work on improving the asset quality and reducing the cost of risk by cleaning balance sheets through the reduction of NPEs.

The year 2016 represented the turning point for the NPL issue. In 2017, pushed by the International regulator, helped by several reforms implemented by the Italian government and the improvement of macroeconomic conditions, there are some evidences for a positive change in the NPL stock evolution (see chart below).

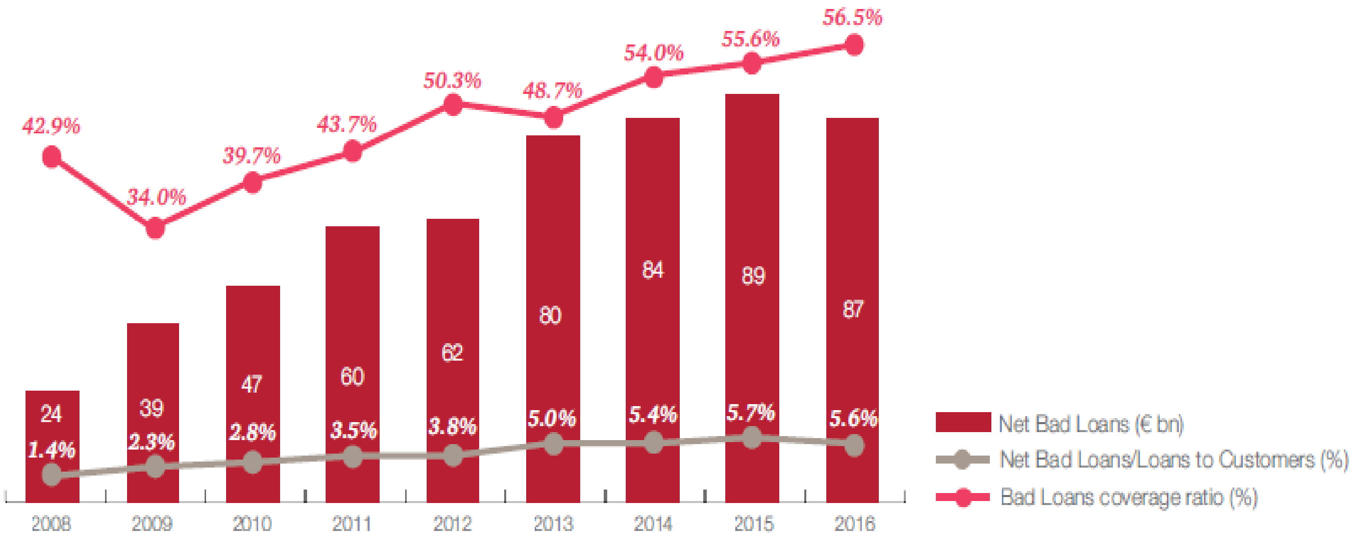

Figure 2: NPLs breakdown, (PWC- The Italian NPL market-The place to be, July 2017)

The operation related to the reduction of NPEs should be a corporate strategy to sell-off non-core assets, and not a simple disposal of bad past investments. The risk appetite of big investors for new high yield investments' opportunities is moving the attention towards the Italian NPLs market, which volume of bad loans disposal continued their positive trend after 2015, reaching approximatively €17.3bn[4] in 2016, and are expected to grow exponentially in 2017 reaching the huge amount of €104bn[5].

Indeed, whether on the seller side NPLs represent a big problem, on the buyer side, they represent an interesting business opportunity especially for foreign investors, who believe Italy is becoming the core of the European NPLs market. In fact, with 16.4% of Non-performing loans on the total amount of Gross customers' loans (NPL ratio), Italy is the fifth

[4] Banca IFIS, Market Watch NPL – The Italian Scenario, July 2017.
[5] Banca IFIS, Market Watch NPL – The Italian Scenario, NPL meeting, September 2017.

worst country in Europe according to the annual report of December 2016 of the European banking authority (see chart below).

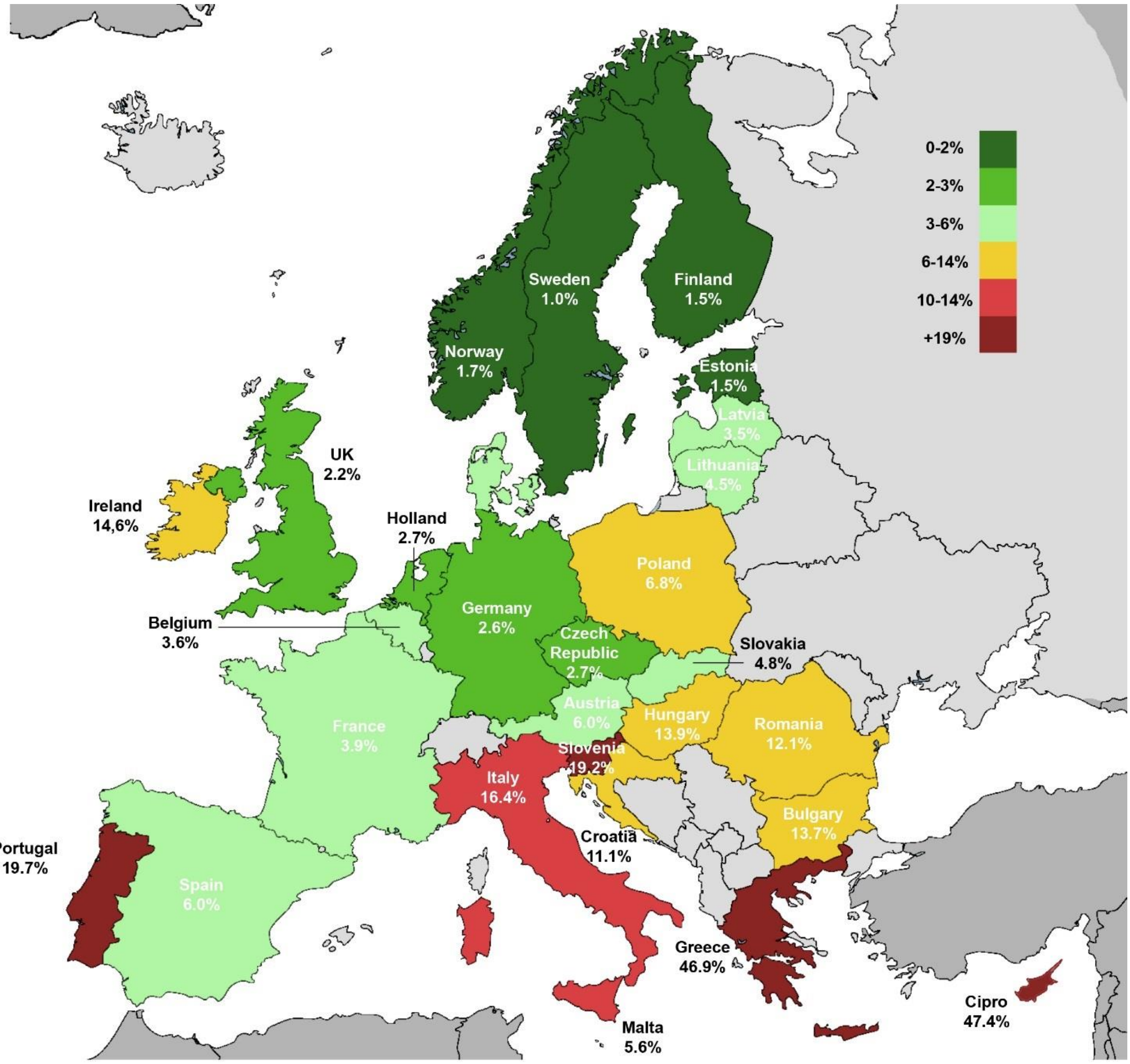

Figure 3: NPL ratio by country in Europe, (own elaboration based on data provided by Il Sole 24 Ore)

Fabio Panetta, Bank of Italy vice-director, underlined exhaustively the awkward and the complexity of the NPLs issue, which solution comes out not only from the contribution of Banks or Regulators or the better macroeconomic outlook, but "*requires time and the total participation of the political system […]".*

The procedure of repairing the banking sector is in process and requires three key steps:

1. **Capital strengthening**: National and International supervisors pushed financial institutions to raise significant amount of capital, increasing CET1 ratio on average, from 9% in 2011 to over 14% at end of 2016;

2. **Identification of problematic assets**: supervisors performed asset quality reviews on the most important banks across Europe to help financial institutions in addressing the target of cleaning balance sheets.

3. **Cleaning balance sheets**: this final step has now become imperative because of the scale of the NPL issue across Europe and its negative impact on economic recovery, being capital trapped in non-performing investments. In its report on December 2016, EBA said the average European NPL ratio was 5.5%, with 10 countries reporting average NPL ratios over 10%. According to EBA, non-performing loans in the Eurozone remain up to three times higher than other global jurisdictions.

The interest for this topic has risen during my experience as an intern in the UniCredit Investor Relations office in Milan. During these months, I had the opportunity to see how the lender decided to deal with the NPLs issue and, in particular, the financial communication strategy of the FINO project. Talking with analysts and investors I understood that NPLs represents the biggest challenge for the European banking system and the importance of this topic spurred me on studying this theme and try to create my own opinion and view on this object.

The purpose of this work is to study the non-performing exposure issue, and through a description of its trend during last years, to understand the way banks are deciding to face this problem. The time horizon used for the analysis and for data extrapolation, starts from the explosion of the financial crisis in 2007, until first half 2017. The focus of the entire work is on Italy, the situation of the Italian banking system, the past and present macroeconomic scenario and its future forecasts.

One of the most relevant issues related with the writing of this work was the absence of homogeneous numbers and data concerning the stock of non-performing exposures. During last years, there have been several reports from authorithies and companies that tried to provide a picture of the situation of non-performing loans market in Europe. For what concerns the Italian NPLs market, I decided to rely on data provided by Banca d’Italia in its last report on Financial Stability[6] issued on April 2017, while forecasts and estimations are drawn from reports and analysis performed by important financial companies[7], which are using a great deal of efforts in their works in addressing the Italian NPL issue.

This paper introduces the UniCredit NPLs disposal plan, the FINO project, which is a key pillar of the new strategic plan for 2016-2019, presented on 13th December 2016 in London. The description of this program and the analysis of the way through which the bank sells off part of its bad loans, provide us an empirical example to better contextualize in a more practical way the theory of the NPLs' divestment policy.

I will focus firstly on the analysis of the Italian macroeconomic context to understand the background in which NPLs has originated and the framework on which Italian banks currently operates.

At a second stage, after an introduction of the definitions of Forbearance (FBE) and non-performing exposures (NPE) provided by EBA[8], I will debate the main characteristics of the Italian non-performing loans market compared to the other European NPLs' markets, both form a seller and a buyer perspective. This comparative analysis will allow the reader to understand the legal and structural difficulties Italian banks encountered during last years to keep up with the other European peers. At the same time, the efforts carried out by the Italian government during last legislature are contributing to make the Italian NPLs market more attractive especially for foreigner investors, resulting in a growing trend of bad loans' disposal.

Using Banks as subjects, we will present the ECB draft guidance published in September 2016, and use the recommendations contained in it to understand the way financial institutions should implement a NPL management strategy.

Finally, answering to the question of what banks can do to stem the deterioration of their asset quality, this work will provide a description of the different strategies banks can implement for the disposal of bad loans. In explaining these options, the paper will introduce the UniCredit FINO project related to the disposal of about €17.7bn of non-performing loans,

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[6] Banca d'Italia, rapporto stabilità finanziaria 2017.
[7] Banca IFIS, Ernst & Young and PWC.
[8] Amendments of the common EU-wide IFRS Supervisory reporting framework (FINREP) on 21 October 2013.

decorated with an interview to Piero Munari, current Head of UniCredit Investor Relations Office in Milan.

At the end of the text, using the analysis made in the chapters of this work and with the kind help of Mr. Fabio D’Orefice, Direttore area Nord of Banca Sviluppo and previously General Director of BCC Gestione Crediti, I will try to draw a final scheme on the possible solutions banks can implement to solve the NPLs issue. Mr. D’Orefice point of view, will help me in creating a sort of guided path for financial institutions, to codify some code of conducts with the aim of cleaning up the confusion still lingering on the NPLs “world”.

2. Macroeconomic Background

"Banks could be tempted to reduce their commitment towards the process of cleaning balance sheets from toxic assets if they rely too much over the improved macroeconomic conditions. Even if the positive economic outlook will for sure help banks in disposing non-performing exposures, the risk is that financial institutions let guard down and lessen all the indispensable processes to face the NPLs issue."

Ignazio Angeloni, board member of the European supervisory authority.

This statement released by Angeloni outlines the strict connection between non-performing loans and the macroeconomic scenario. The favorable economic forecasts released by the European commission in Spring 2017 confirmed the positive scenario of the Italian economy for the next two years, which real GDP is expected to grow by 0.9% in 2017 and by 1.1% the next year[9]. The overall Europe is expected to face a robust growth in the same period (+1.8% in the two-year period[10]) despite several concerns about difficulties of emerging markets, terrorists' attacks and Brexit. These numbers are sustained by an improvement in labor market and a consequent decrease in unemployment rate. The growth in private consumption is boosted by an improve in disposable income. One of the sector mostly connected with non-performing loans is real estate, which provides collaterals for credits. The overall growth in 2016 both in residential and non-residential properties took the market to transaction levels previously recorded before the crisis in 2012, and sustain the prices' stabilization. As the market price of properties stabilizes, the value of collaterals increases and secured loans become more attractive. At the opposite, a drop in the value of collaterals could negatively affect the loan quality. All these figures justify the growth of loans granted by banks to private customers and reduce the probability of assets' deterioration. However, the elevated political and economic risks still create a challenging environment for banks, especially in Italy where the recovered strength of the two largest Italian lenders Intesa San Paolo and UniCredit put together with the positive performances of other smaller Italian banks like UBI, is still threatened by the unstable financial health of MPS and the consequences of the Banca Popolare di Vicenza and Veneto Banca situation.

[9] PWC, The Italian NPL market, the place to be, July 2017.
[10] PWC, The Italian NPL market, the place to be, July 2017.

If, on one hand, the better economic forecasts are contributing to reduce the exposure to the non-performing loans' issue, on the other hand, the gloomy macroeconomic conditions which characterized the period from 2008 to 2015, contributed to magnify the non-performing loans stock creating the so-called legacy issue. In Italy, the severe decrease in GDP and the freeze of the real estate market during that period was only some of the most evident factors. As shown in the two following graphs[11], the financial crisis hit Italy twice creating a gap with the other European countries, which GDP instead in 2015, recovered from the recession.

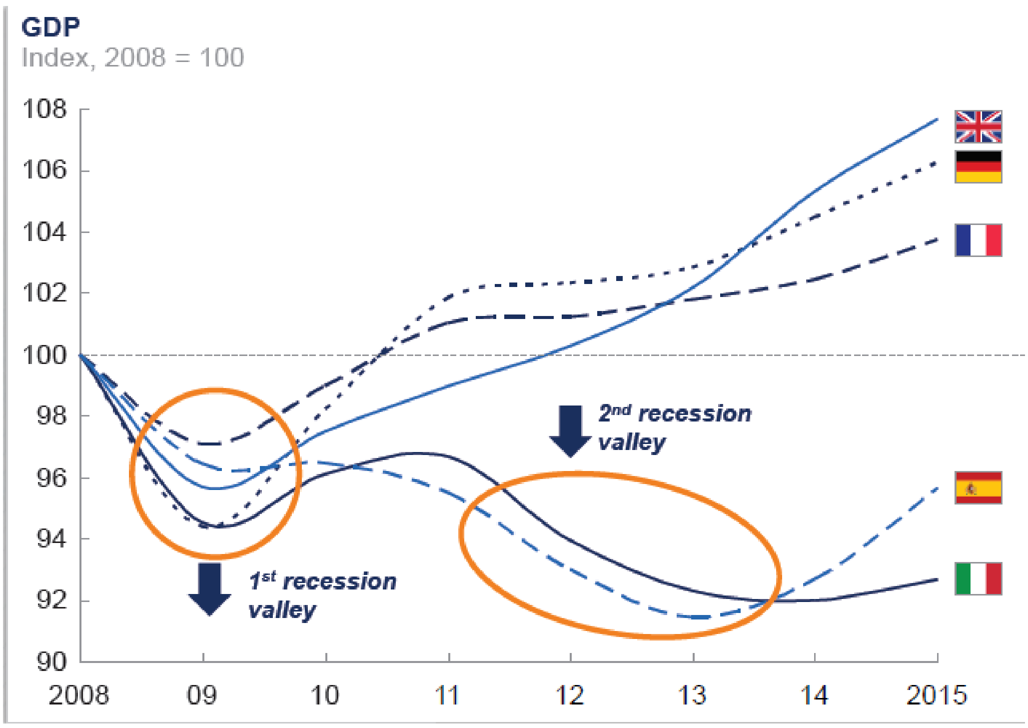

Figure 4: GDP Index performance of the main European countries, (Banca IFIS Area NPL, "Fill the gap, NPL meeting", Venice 16th September 2016)

The first recession coincided with the so called subprime mortgages crisis, diffused form the United States to the rest of the world. The second drop in GDP, instead, concerned peripheral European countries like Spain, Greece, Portugal, Ireland, Cyprus and Italy which cost of refinancing their government debt became too high due to a massive sale of bonds, which causes interest rates to surge. In the following graph, Italy's GDP is shown in relation with the stock of NPLs and other categories of non-performing exposures. As we can see,

[11] NPL meeting, Fill the Gap Venice 16/09/2016.

there is a negative correlation between GDP and NPEs. To Gross Domestic Product sharp drop (highlighted in the graph) corresponded steep increase in Past due (PD) and Unlikely to pay (UTP) exposures. This means that, during that period, there was a significant outflow of loans from performing to non-performing status. The GDP drop consumed customers' earnings and reduced their capacity to face their financial obligations in terms of interests and principal payments. Therefore, financial institutions were forced to change the status of loans granted to reflect the higher probability of default of their holders. As the crisis' effect on the real economy continued to multiply, the stock of Non-performing exposures increased consequently year over year.

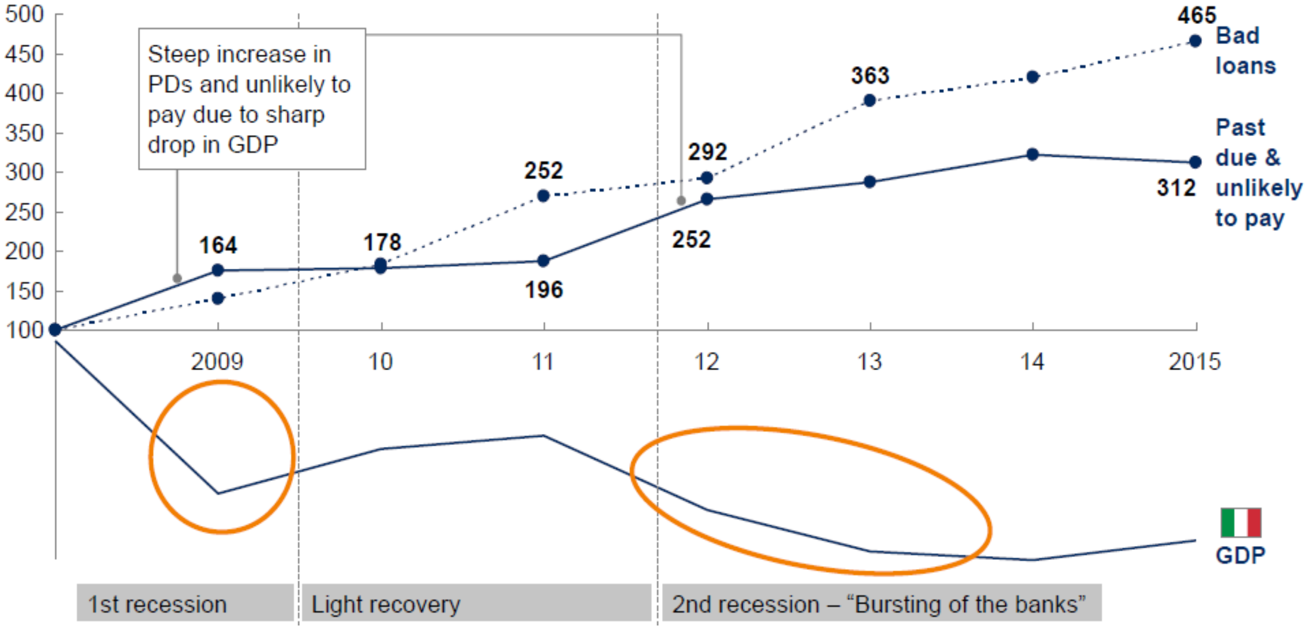

Figure 5: Italian GDP in comparison with NPEs evolution, (Banca IFIS Area NPL, "Fill the gap, NPL meeting", Venice 16th September 2016)

Like a circular process, gloomy macroeconomic conditions negatively affect NPLs' stock and high levels of non-performing loans are associated with stagnant growth, being capital stuck in NPLs and not funding new lending into the real economy.

A demonstration of these evidences is provided by the role of the different sectors as the main drivers behind non-performing exposures' exponential growth during the last seven years. If we examine the table below, we can see that four sectors (construction, manufacturing, wholesale/retail trade and real estate) contributed to the 75.7% of the total amount of bad loans from 2009[12]. The negative performance of those industries weighted on Italian GDP growth and created the legacy that now banks are facing.

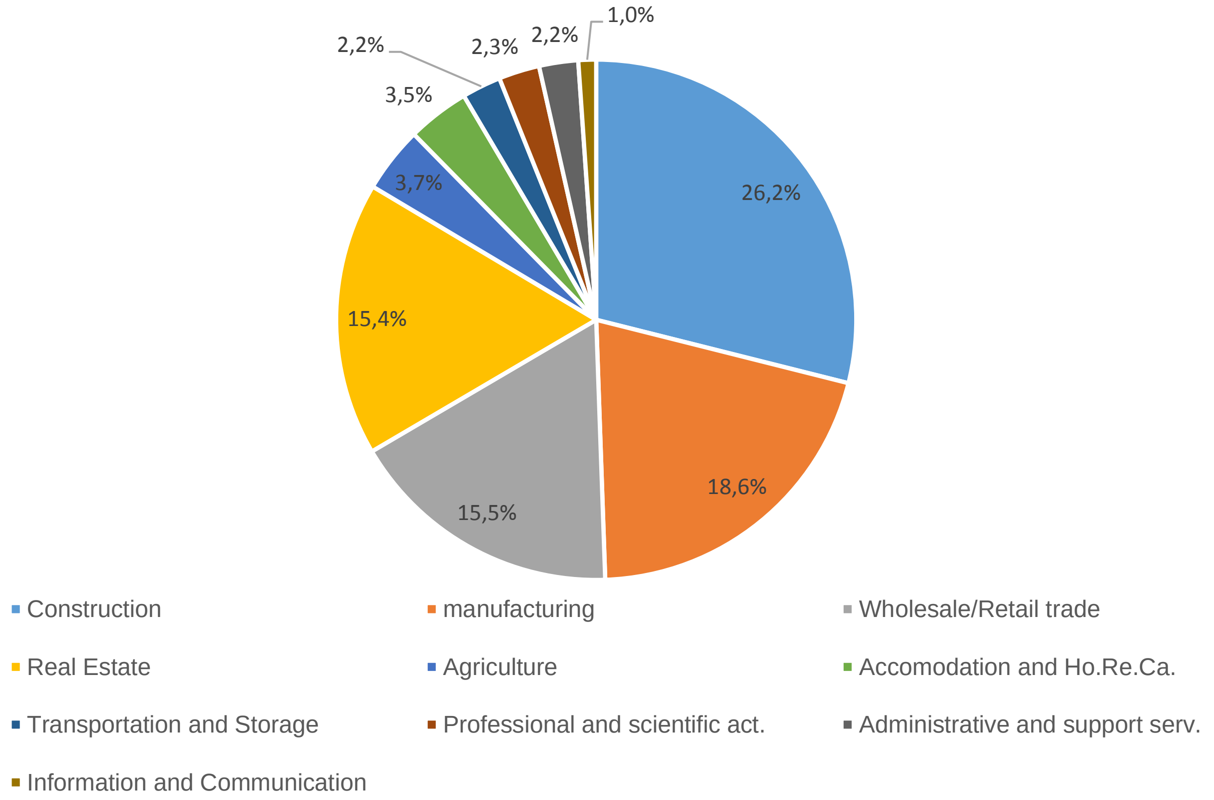

Figure 6: % of NPLs on total amount of loans for each industry in Italy as of Q1-17, (own elaboration based on data provided by Banca IFIS Area NPL, "Market Watch NPL The Italian scenario, special edition NPL meeting", September 2017)

As we will examine later in this work, macroeconomic conditions are not the only reasons that determine the high level of non-performing loans weighing on the banking system. Ignazio Angeloni stated in fact that: "*Not all the NPLs have been originated form the economic recession, but part of those toxic assets concern bank specific internal factors like credit performances, internal monitoring processes and governance practices".*

[12] Banca IFIS, Market Watch NPL – The Italian scenario, July 2017.

3. NPLs recognition based on EBA definitions: NPE, Past Due, UTP, Forbearance

In October 2013[13], the European banking authority released the definition of Forbearance (FBE) and Non-Performing Exposures (NPE). This amendment was born with the intention of creating a common and uniform legislation background in order to favor banks on facing NPE issues and promote sound credit risk practices. Before of this date, 9 European Jurisdictions implemented their own national definitions of non-performing exposures, while, 11 EU countries, did not have their own definition and used, instead, International principle, i.e. IFRS or GAAP. This situation was particularly challenging for cross border banks, which implementation of strategies was hindered by the inconsistent regulation on this topic. The improvement of the new regulation allowed comparing asset quality in a homogeneous way across all European Institutions, favoring discussions about risk among banks and becoming a starting point data of the recent stress tests developed by the ECB. Furthermore, from the regulator perspective, it enhanced the efficient valuation and vigilance of the banks' exposures, and a better coordination of supervisory actions. The definitive incentive to develop these definitions was given by the explosion of the financial and sovereign crisis in Europe, which raised concerns on potential misuse of forbearance to avoid recognition of impairments and concerns about lack of timely and correct classification of non-performing exposures due to optimistic valuation or abuse of forbearance measures. The existing accounting and regulatory frameworks were used as starting points for the implementation of the "new" definitions of:

Fully Performing loans: loans and debt securities that are not past-due and without risk of non-repayment and performing off-balance sheet items.

Past Due: loans which principal amount, interests or fees has not been paid at the date it was due (in case of compulsory payments) with a maximum delay of 90 days. The counting of days stars as soon as any amount (principal, interest or fee) has not been paid at the date it was due.

Non-performing: loans past due more than 90 days or unlikely to be repaid in full without collateral realization.

[13] Amendments of the common EU-wide IFRS Supervisory reporting framework (FINREP) on 21 October 2013.

Forbearance measures: concessions towards a debtor facing financial difficulties. They consist of modification of the terms and conditions of the contract or total/partial refinancing of the exposure subject to financial distress situation of the debtor.

UTP (unlikely to pay): loans which identification rely less on quantitative criteria but more on qualitative triggers fixed by the bank. These loans are closer to the non-performing status rather than to the performing status.

These definitions are useful to define borders that delimit the different categories of exposures. The regulator emphasizes particularly the flow from performing to non-performing and vice versa, being their recognition fundamental for the correct evaluation of the banks' asset quality. According to the definitions of non-performing provided by EBA, an exposure ceased being non-performing when:

1. It has met the exit criteria out of impaired and defaulted categories;
2. An improvement in the situation of the debtor makes the full repayment likely according to the original or modified (forborne) conditions;
3. The debtor does not have any amount past-due by more than 90 days.

A particular attention is also given to forbearance measures. Forborne exposures are transversal to the non-performing and performing one and therefore the regulator pays a particular attention on them, given also the concrete risk banks could exploit a lack of regulation for using forbearance measures and modifying loans' status. In general, the application of a forbearance measure is accompanied by an assessment of the financial situation of the debtor with the help of specific triggers like the increase of probability of default (PD) of the borrower. This is useful first of all to evaluate whether the borrower is facing financial difficulties, but also to be sure that the application of the new measures on the loan, does not lead to a modification of the status of the debt. A forborne exposure can be performing or non-performing[14]. The scheme below provides a graphic representation to explain the different consequences of the extension of a forbearance measure.

[14] Paragraph 178 of Annex V of Commission Implementing Regulation (EU) No 680/2014.

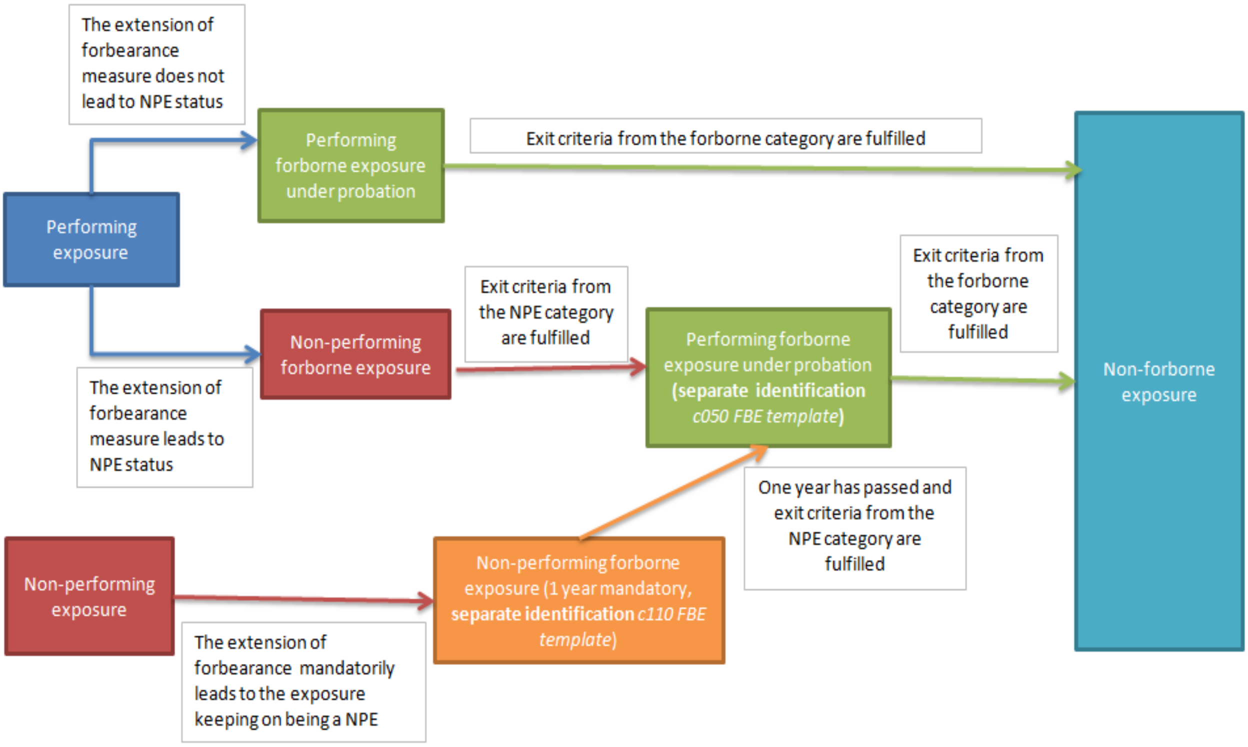

Figure 7: Forbearance procedures on performing and non-performing exposures, (EBA, "Risk Assessment of the European Banking System", December 2016)

As we can see in the figure, the regulator[15] fixes some exit criteria to determine when and whether the debt met the reclassification criteria (exit criteria from non-performing category). This mechanism is similar to the one that regulates the flow of the exposures from performing to Impaired and the other categories of non-performing exposures. For what concerns the first procedure, time is used as exit criteria. The difference between the case in which the extension of the forbearance exposure does not lead to a non-performing exposure, and the situation in which it determines the change of the status of the loan, is the starting date of the exit criteria, or **probation period,** which is two-years long. In the first case, the probation period runs as soon as the forbearance date and, at the end of the period, the exposure ceases being classified as forborne (see imagine below).

[15] EBA, Annex V of Regulation (EU) No 680/2014 – ITS on Supervisory Reporting.

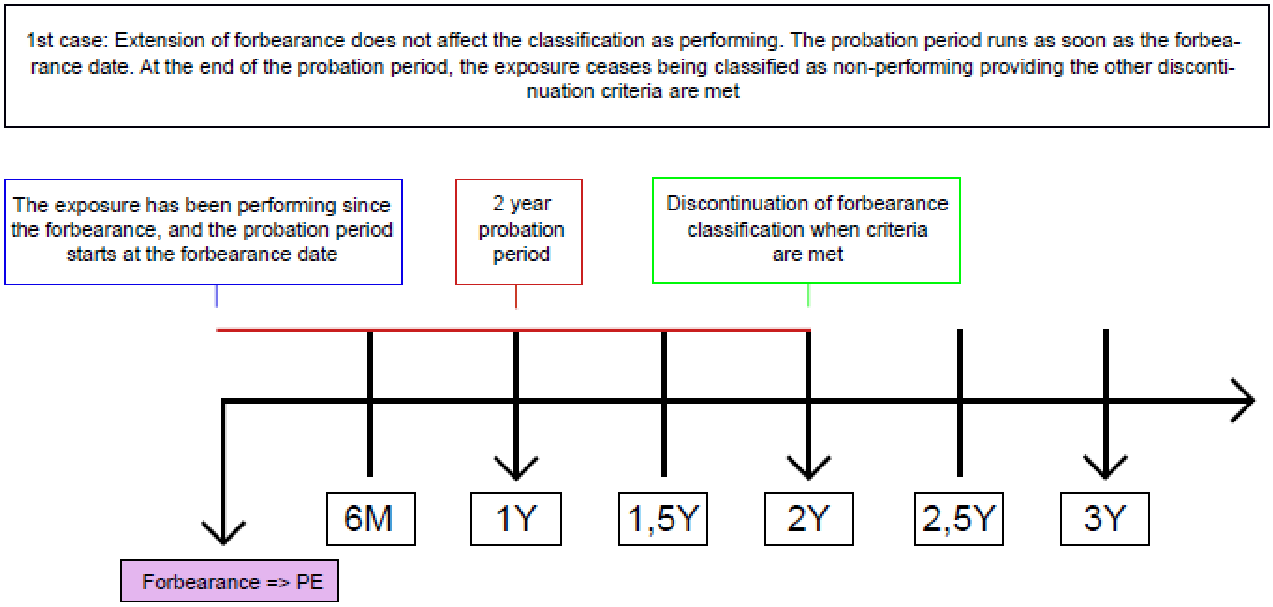

Figure 8:Case 1: extension of Forbearance does not lead to a non-performing loan, (EBA, "Risk Assessment of the European Banking System", December 2016)

In the second case, the entire process is expected to be longer because the extension of the forbearance measure leads the exposure changing its status to non-performing. This situation forces the regulator to design a different process to guarantee banks do not change earlier the status of their exposures, weakening their asset quality. As shown in the figure below, the probation period starts only as soon as the exposure exits the non-performing classification, after one year the forbearance date.

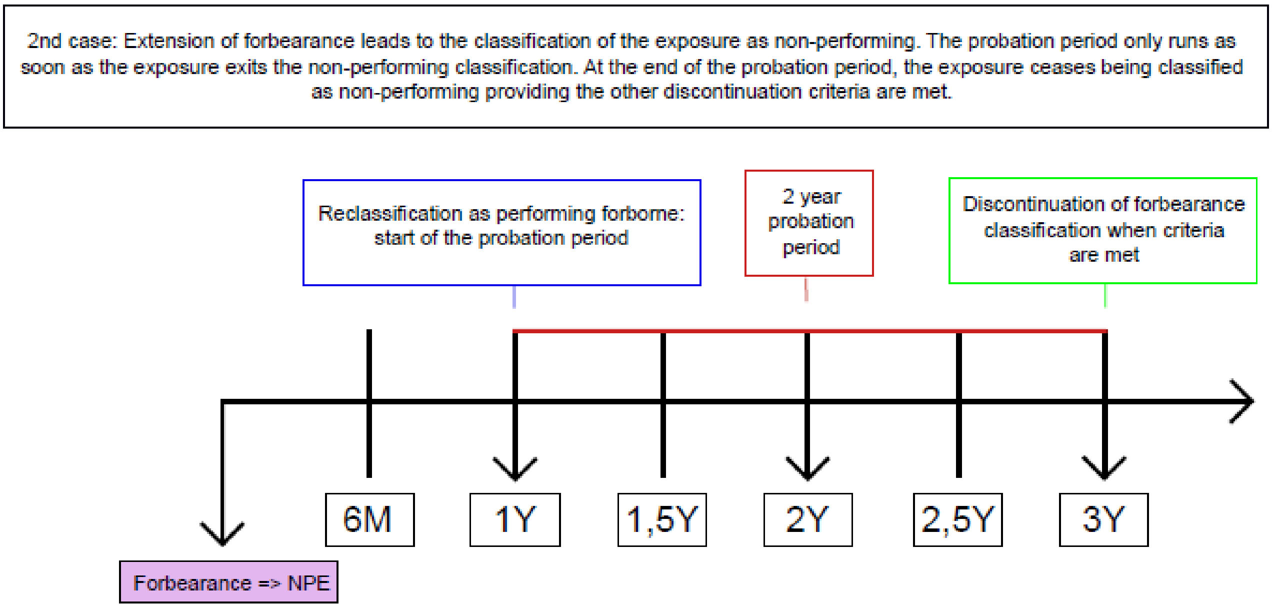

Figure 9: Case2: extension of Forbearance leads to a non-performing loan, (EBA, "Risk Assessment of the European Banking System", December 2016)

Finally, the extension of the forbearance exposure applied to an already non-performing debt does not clear the non-performing status. At the contrary, the regulator applied a mandatory one-year **cure period** to restore the exposure to performing. At the end of the cure period, the two-year probation period starts running (see imagine below).

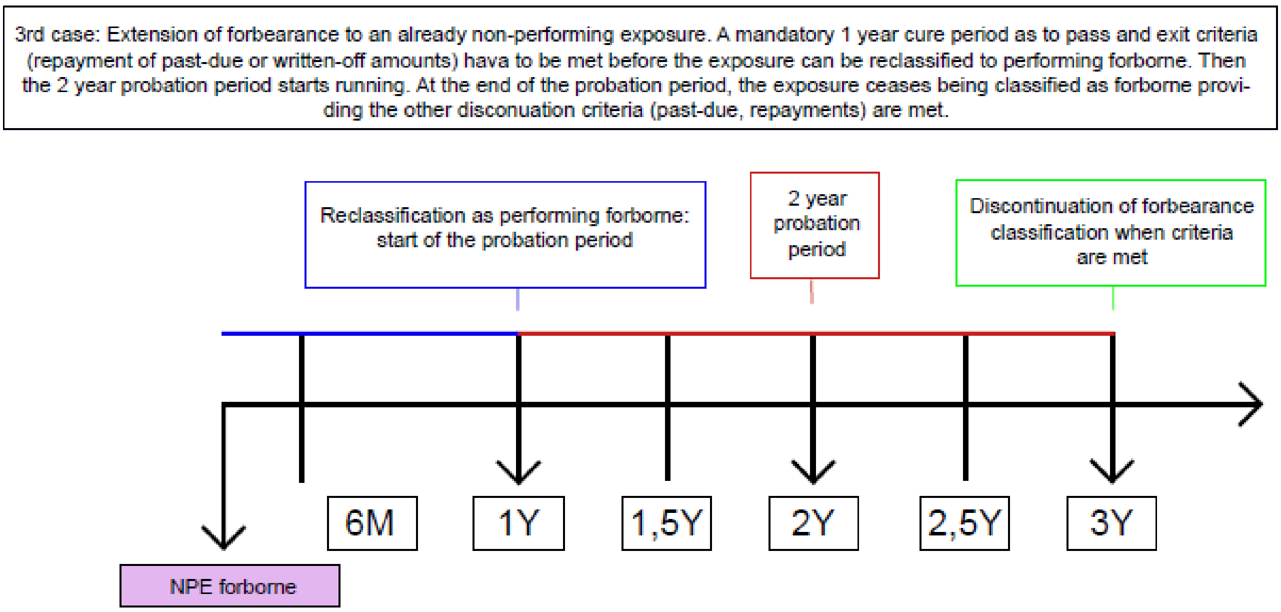

Figure 10: Case3: extension of Forbearance on a non-performing exposure, (EBA, "Risk Assessment of the European Banking System", December 2016)

The process here examined prove the complexity and the relevance of the non-performing exposures issue both from the banks perspective and the national and international regulators. By outlining the framework, the reader is now able to understand how, at the current stage where still some confusion persists, banks have still a lot of room to avoid a concrete action against the problem. This issue cannot be solved without the common efforts of political and banking system. The first one must direct and define the track, creating a simple and clear path that banks must follow, and activate a concrete monitoring strategy, while financial institutions must concretely and seriously address the problem.

4. ECB guidance to banks on non-performing loans: how to develop a NPL strategy

The final guidance on the NPL management[16] is the result of the draft guidance introduced in 2016, more recent public consultation process and public hearings. The recommendations here expressed concern the main aspects related to the NPL management, from the strategy definition to the governance policies and operations. They provide some recommendations and depict best practices that will constitute, in the future, the European Central Bank's expectations. Even if the guidance is not binding, any institution deviating from the prescriptions here presented is invited to explain the reasons behind their decisions, otherwise it will be subject of additional supervisory measures.

The addresses of this guidance are credit institutions (banks) and all significant institutions (Sis). The rules will be the same for all banks but the guidance will not, as those with a higher level of NPLs[17] need to move faster to address the problem and work intensively to put in place credible and properly resourced plans. A bank is an "High NPL bank" in the following cases:

1. High level of NPL inflows;
2. High level of forbearance and foreclosed assets;
3. Low levels of provision coverage;
4. High Texas ratio.

There will not be a generic NPL threshold for all banks but bank-by-bank ambitious and credible portfolio-specific targets, because generic goals would have resulted to be non-realistic or not sufficiently ambitious for some lenders. However, there will also be a benchmarking among peers.

The ECB expectation is for a more proactive approach to NPLs and more discipline in the execution of banks' action plans, which will be tracked by the supervisor and becoming eventually part of the SREP in case of deviations. The ECB is looking at the entire NPL management chain including the bank strategy, governance and operations, forbearance treatment, NPL recognition, provisioning and write-off, and collateral valuation. Banks are required to implement ambitious and realistic NPL reduction targets which will bring with

[16] On 20th March 2017, the ECB released the final guidelines for the Banks on Non-Performing loans.
[17] ECB's banking supervision defines high NPL banks as banks with an NPL level equal or higher than 7%.

them more provisions but then improving visibility and investor sentiment and reducing earnings volatility.

The guidance puts banks in the position of considering themselves responsible for implementing proper strategies for the NPL's portfolio management and helps them in understanding that the higher the level of NPLs, the higher the additional provisions against these non-performing exposures needed, the lower net income and bank's profitability. Furthermore, it encourages financial institutions to take into consideration the external environment and the European competitive scenario, allowing them to successfully face future challenges.

The Chair[18] of the ECB's High-Level Group on NPLs made it very clear that "*the "wait-and-see" or "extend and pretend" approach we have too often observed in the past cannot, and via the guidance, will not continue*". She also admits that legal and judicial aspects pose a considerable challenge for NPL workout and that lengthy legal procedures and insufficient court capacity significantly inhibit banks' ability to quickly reduce their NPL stock, urging the implementation of actions to improve the efficiency of legal and judicial systems. However, the current state of the legal and judicial systems should not justify a lack of action on the side of banks.

Addressing the Asset quality issue became one of the key priorities for the European Central bank, with the introduction from 2014 of a comprehensive assessment, which comprised an asset quality review and a stress test[19]. Since this new legal procedure, banks were forced to establish an NPL strategy consisting of the definition of NPLs reduction targets over different time-bound horizons, usually from one year to three years. This is not an easy task because it should be the result of a complex process of an internal and external environment assessment, and a combination of banks' capabilities with current market situation. Therefore, the strategy should consist of four different steps:

1. A periodical comprehensive assessment of the external and internal environment (NPL capabilities in term of staff and resources);

[18] Sharon Donnery, Deputy Governor of the Central Bank of Ireland and Chair of the ECB's High Level Group on NPLs.
[19] 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".

2. The development of a NPL strategy in terms of time horizons and projected volumes reductions;
3. The implementation of the Operational Plan including the embedding in the organizational structure and the Risk Management Framework (RAF) of the Institution;
4. A fully embedding of the NPL strategy into the operational plan to ensure full alignment between them.

The assessment of the external factors plays a central role in defining an effective NPL strategy. Banks should evaluate Macroeconomic conditions like the dynamics of the real estate market for the estimation of collaterals, the trend of domestic and International NPL markets for pricing portfolios and the National and International Regulatory, legal and judicial frameworks.

The final result of the above assessment should be a Strategy implementation option which takes also in consideration the short, medium and long-term targets of NPLs levels the bank wants to achieve. The implementation option consists of the driver of the NPLs projected reduction. The lender could decide to hold loans managing the process internally aiming at cash recoveries, sell to external investors, write-off NPLs that are considered unrecoverable or change the exposure type through foreclosure or debt to equity swap, securitization procedures and finally out-of-court solutions and insolvency proceedings. The strategy need to be reviewed regularly due to the continues developments and changes of the market.

Once the strategy has been defined, the financial institution outlines the concrete actions that should allow the implementation of the NPL strategy. This operational plan contains responsibilities and reporting mechanisms, staff and resource requirements, a budget and an interaction and communication plan with internal and external shareholders.

The implementation and the effective realization of the recommendations expressed in the guidance is subject to a comprehensive change of the bank business model and the main impacts are on the following business structures:

Figure 11: Business structures influenced by ECB guidance to banks on non-performing loans, (own elaboration based on data provided by PWC- The Italian NPL market-The place to be, July 2017)

4.1. NPL workout units

According to the ECB guidance, "*a suitable NPL operating model is based on dedicated NPL workout units (WUs), separated from units responsible for loan origination"*. WUs should have separate books and dedicated experienced staff, who should take over the management of all the phases of the NPLs life cycle. These Units should be charged of reducing NPLs levels in the short and medium terms and their work monitored and reinforced by incentives given based on the achievement of predetermined targets. The ECB identifies four phases:

- **Early arrears (up to 90 days past due):** the focus of this stage of the process is on collecting information for the assessment of the borrowers' financial position, status of collateral and level of cooperation, to allow an appropriate borrower segmentation;
- **Late arrears:** during this phase, after having concluded the affordability assessment of the borrower in order to find viable restructuring options, the lender implement forbearance arrangements with the borrower;
- **Liquidation:** this phase involved only those borrowers for whom no viable forbearance solutions have been found. Banks should initially evaluate the different liquidation options and later define a dedicated debt recovery policy;
- **Management of foreclosed assets:** at this stage, the bank clearly defines the triggers which describe the flow of the loans between the different classes.

The effective execution of the entire process is subordinated to a clear and defined portfolio segmentation, which enables the bank to group borrower with similar characteristics in terms of required treatments, solutions and liquidation approach assigning to them a customized and tailored process. Example of NPL segmentation criteria are the one related to:

- Natural or legal person (Retail client, SMEs, Small businesses and professionals);
- Days past due (>1 days past due and <90; >90 days past due);
- Level of risk (high, medium, low);
- Purpose of credit;
- Customer outlook (age, health).

It is easy to understand that the bank should build an adequate technical infrastructure enabling the NPL WUs to:

1. Easily access to relevant information and documentation about the borrower, its current payment status, exposure, collateral status and forbearance performance;
2. Process and monitor NPL workout activities through automated workflows throughout the entire NPL life cycle and automated tracking system for the loan status to ensure a correct flagging of the loan.

In particular, banks need to create efficient and unique database enriched with all necessaries information of the portfolios and debtors, to allow WUs a granular portfolio's management. These data should be updated frequently and easily and readily accessible by all the different business units.

4.2. Monitoring of NPLs

The monitoring system should be based on the NPL strategy and consists of key Performance Indicators (KPIs) that allow managers to measure progress regarding the management of non-performing exposures. Monitoring should involve both debtor and the internal portfolio level and it should be performed in a proper way because the resulting evidences can alter and change the hypothesis of the NPL strategy. ECB identified four major categories and the NPL-related KPIs:

Categories	KPIs
High-level NPL metrics	Indicators (Texas ratio)
Customer engagement and cash collection	% of engagements converted to a payment or promise to pay
	Cash collected
Forbearance activity	Cure rate, re-default rate, cash collection rate, NPL write-off
Liquidation activity	Legal measures and foreclosure
	Debt to equity swap

Figure 12: NPL KPIs

4.2.1. High level NPL metrics

For what concerns the first category, ratios and indicators are more effective whether benchmarked against peers. The Texas ratio[20], for instance, provides a link between banks' NPL exposures and capital level[21] and, for this reason, it represents a very useful tool widely used throughout banking industry and strictly monitored by International regulators. If the level of NPLs is too high (as described by the Texas ratio's numerator), the bad loans will erode the bank's equity cushion, which could cause it to fail. Likewise, if there is not enough equity (as described by the Texas ratio's denominator), the Institutions will not be able to absorb many bad loans causing the bank to fail.

[20] Texas Ratio developed by RBC Capital Markets' banking analyst Gerard Cassidy as a way to predict bank failures during the state's 1980s recession.
[21] Texas ratio = Non-Performing Loans + Real Estate Owned) / (Tangible Common Equity + Loan Loss Reserves.

Bank	Texas ratio (%)
Veneto banca + Pop. Di Vicenza	160
MPS	149
Banco BPM	137
BPER	118
UBI	111
BNL	106
Cariparma	103
UniCredit	96
Intesa San Paolo	91
Credem	59

Texas ratio over 100%

Figure 13: Italian Banks Texas Ratio, (own elaboration based on data provided by PWC- The Italian NPL market-The place to be, July 2017)

The Graph above, shows the Texas ratio for some of the largest Italian banks, computed on a research by PWC. A value above 100% represents a warning signal weighing on banks' ability to continue lending. According to this research, the largest part of the lenders surveyed, have a Texas ratio higher than 100% with Monte dei Paschi di Siena, Banco Popolare and Veneto Banca ranking at the top of this list.

4.2.2. Customer engagement and cash collection

These metrics are used to assess the efficiency of the staff employed in the Workout Units. Examples are cash collected from customers' payments or total long-term forbearance solutions agreed with borrowers.

4.2.3. Forbearance activity

Forbearance activity is the temporary postponement of loan repayments; the outcome is the repayment of the amount due and not a delaying of the assessment that the exposure is uncollectable, which would lead to a misrepresentation of the asset quality. These measures should always aim to return the exposure to a situation of sustainable repayment, preventing the borrower from reaching a non-performing status. Forbearance activity could be measured in terms of efficiency and effectiveness. This strategy is effective when modified contractual obligations of the borrower are met, and the bank finally succeed in collecting the amount of the loan. The efficiency is measured through the Net Present Value approach to determine whether the forbearance solution would be better compared to other available options, i.e. repossession or liquidation. Example of KPIs to monitor the success rate of the restructuring solutions are:

- **Cure rate** and **re-default rate**: the **cure rate** is necessary to evaluate whether the loan has been effectively cured and the borrower overcome the financial difficulties that make forbearance activity necessary. The **re-default rate** can be directly derived from the Cure rate and is equal to (1 - cure rate);
- **Cash collection rate**: it can be monitored against the revised contractual cash-flows, i.e. the actual to contractual cash-flow ratio, providing information for liquidity planning purposes;
- **NPL write-off:** in certain cases, banks can proceed with a forbearance option that involves partial or full NPL write-off. This should be monitored against an approved loss budget and the net present value loss associated with the decision to write off should be monitored against the cure rate. This strategy usually represents the last possibility due to the radicalism of this option and the consequent relevant losses associated to it.

Forbearance procedures[22] can be distinguished according to their time horizon; short term forbearance measures usually do not exceed two years and should be granted only whether the debtor demonstrated via a written document to have faced an identifiable event that causes temporary liquidity constraints but, at the same time, demonstrates clear willingness to cooperate.

The following deliberately simplified example will facilitate the understanding of the functioning of short-term and long-term forbearance measures. The owner of an Apulian restaurant in Milan incurred a debt to finance the payment of Kitchen’s furniture and accessories; the restaurant supply bread, oil, cheese and other ingredients directly from its supplier in Altamura. The ability to repay the debt is related to the number of covers and daily proceeds. Due to a non-predictable one-week trackers’ lockout, the restaurant is not able to offer its traditional Apulian food. The missed proceeds weight heavily on the monthly

[22] See chapter 3 about EBA definitions.

profit and, at the end of the month, the restaurant owner does not have enough liquidity to cover the amount due to the bank. In addition, the one-week stop caused to the restaurant a bad advertising that reduces the number of clients also the following month, damaging the ability to repay the debt also in the following periods. The insurgence of non-preventable events that caused liquidity constraints in the borrower's financial situation, creates the conditions for the application of a forbearance measure. The bank, after having assessed the borrower has not entered in a "non-performing area", and after having correctly evaluated the willingness to repay the debt, can decide to renegotiate the conditions of the contract for a limited period as long as the borrower uncertainties persist. For example, the bank decides to limit the repayment only to the interests due, excluding the principal, which amount remains unchanged for that period before being reassessed at the end of the "interest only period", subject to the assessed repayment ability. An alternative long-term forbearance measure is the extension of the term of the loan, which allows a reduction in instalment amounts by spreading the repayment over a longer period. In the second scenario, the restaurant owner need to demonstrate its ability to service the revised loan repayments through sources of verified income. Once the forbearance solution has been signed, the bank creates credible and conservative targets to be achieved in order to constantly monitor the repayment schedule of the borrower and perform an affordability assessment analyzing of the debtor evaluating its regular income, the level of expenditures, other debts, employment prospects and willingness to repay.

4.2.4. Liquidation Activity

The liquidation activity is the final step after the bank provided that no sustainable restructuring solution has been reached. Resolution may involve:

- **Initiating legal procedures:** banks should monitor recovery rates and the time period needed to liquidate the collateral for facilities covered with tangibles security in order to better evaluate whether the net present value of foreclose will be higher than pursuing a forbearance option. Finally, banks should also monitor the lengths of legal procedures and the average recovery amounts from these completed procedures;
- **Debt to equity swap:** this measure should be limited to assets where the institution has sufficient expertise to correctly calculate the market value.

In order to avoid the potential negative implications related to the liquidation of non-performing exposures, banks should create early warning procedures that allows identifying potential non-performing clients at the initial stage. The easier way is to implement an entire process that starts with the definition of triggers recovery procedures[23] which function is to create alerts that provide warning's signals to the dedicated units of the bank. To create triggers, lenders should first segment the credit risk portfolio into different classes grouping them according to specific characteristics like business lines, geographical area or types of collateral provided and then perform sensitivity analyses to identify potential shocks that could affect their performing status.

[23] Triggers' examples: debts and collateral increase in other banks, non-performing classifications in other banks, bankruptcy, changes in the debtor's company structure, significant change in liquidity profile, unemployment in case of individuals.

4.3. NPL impairment measurement and write-offs

The strength and safety of the banking system is ensured by provisioning[24]. Banks supervisors ask for adequate levels of provisioning for prudential purpose. For financial institutions, an adequate measurement of impairment provisions passes through the timely recognition of loan losses and timely write-offs. Banks never assume they will collect all of the loans they make. This is why the generally accepted accounting principles, or GAAP, requires lending institutions to hold a reserve against expected future bad loans. This is otherwise known as the allowance for bad debts. The new distressed credit environment highlighted the necessity for adopting a forward- looking approach in the exposure valuation. This new attitude could lead to an increase in the amount of bad loans because parts of loans previously considered performing would be considered non-performing in order to anticipate losses at the first signal of deterioration

In order to facilitate this task to banks, IASB published in July 2014 an amendment of IFRS 9 to be endorsed in the EU regulation by 1st January 2018. The main aspect related to IFRS 9 is the introduction of a new impairment model, moving from an “incurred loss accounting” model to an “expected credit loss accounting” model[25]. Provisions are made when, in the judgement of management, the recovery of the outstanding balance is in serious doubt[26] [27]. According to IFRS 9, the amount of the specific loss allowance[28] is intended to cover the difference between the balance outstanding on the loan or advance and the estimated recoverable amount discounted at the financial asset’s original effective interest rate[29]. To correctly implement this process, banks should firstly determine whether would be preferable applying a collective or an individual estimation of the exposure. The main driver

[24] Recently, The ECB asked banks to increase the coverage over the “new” non-performing exposures which will originate in 2018. The International regulator imposed a coverage equal to 100% to be accomplished not later than 2 years for the unsecured loans; the same rule is applied to secured loans but the time for the provision has been extended to 7 years.

[25] According to the regulator, Non-performing exposure is a concept broader than the one of impaired loans; in fact, all impaired loans are necessarily NPEs but the opposite is not true.

[26] According to IFRS 9, forecasts of future economic conditions when calculating expected credit losses should be considered.

[27]Under IAS 39, impairment provisions are recognized on an incurred loss basis if there is objective evidence that the Group will be unable to collect all amounts due on a loan according to the original contractual terms.

[28] According to IFRS 9, the 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.

[29] Estimated recoverable amount may result from restructuring, liquidation of collateral, realizable market price in case of sale to specialized funds or companies.

for this choice is the relevance (money value) of the loan; for individually significant exposures, an individual assessment should be performed while, at the opposite, NPLs can be grouped in clusters, which share similar characteristics[30] and impairment is measured by reference to the loss history experience of the asset pool[31]. The distinction between these two categories should be defined by banks' managers, by fixing relative or absolute threshold like the impact of the exposure in the financial statement. Groups should not be designed in a way to hide the credit risk deterioration of a single exposure in the cluster, while, if necessary, exposures should be segmented and parameters updated considering the new drivers of change.

IFRS 9 also requests a policy regarding timely and prudent write-off. According to IFRS 9, a write-off represents a de-recognition event, a reduction of the gross carrying amount of a financial asset, when there is no reasonable expectation of recovery[32]. When an amount has been written off from the balance sheet, it is not possible to write-back 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. Therefore, if cash or other assets are eventually collected these collections would be directly recognized as income in the statement of profit or loss.

The IFRS 9 impact on banks P&L is related to the adoption of the Expected Credit Losses model, or ECL model, which earlier prudential recognition of losses on impaired loans will force banks to arise the level of LLPs to increase coverage and meet Regulatory target.

In general, banks prefer to never have to write off bad debt since their loan portfolios are their primary assets and source of future revenue. However, toxic loans, or loans that cannot be collected are unreasonably difficult to collect, reflect very poorly on a bank's financial statements and can divert resources from more productive activity. Therefore, banks use write-offs to remove loans from their balance sheets and reduce their overall tax liability.

4.3.1. Example

For example, a firm that makes $100,000 in loans might have an allowance for 5%, or $5,000, in bad debts. Once the loans are made, this $5,000 is immediately taken as an

[30]Historic loan loss rates, local and international economic climates and portfolio sector profiles/industry conditions.
[31] Examples of characteristics used to group loans: product term and conditions, geographical localization, forbearance measurement applied, industry market segment.
[32] The gross carrying amount of a financial asset is reduced by the amount of the write-off.

expense as the bank does not wait until an actual default occurs. The remaining $95,000 is recorded as net assets on the balance sheet.

If it turns out more borrowers' default than expected, the bank writes off the receivables and takes the additional expense. If the lender actually has $8,000 worth of loans default, it writes off the entire amount and takes an additional $3,000 as an expense.

4.3.2. Consequences

When a nonperforming loan is written off, the lender receives a tax deduction from the loan value. Not only do banks get a deduction, but they are still allowed to pursue the debts and generate revenue from them.

4.4. NPLs' balance sheet evaluation and write-down

The following formula defines the way banks calculate the Gross Book Value of their loans:

$$\textbf{GBV} = \sum_{t=1}^{n} \frac{f_t}{(1+i)^t}$$

Where *f* represents the expected future cash flows and *i* the initial interest rate applied to the loan.

When the debtor enters in financial troubles, the bank must evaluate:

- The probability of do not recover anything of the entire amount due;
- The total amount that the bank is likely to recover;
- The time frame for recovering money.

These considerations determine a change in the value of the future expected cash flows (*f')*, which causes a consequent write-down of the non-performing exposures as it is booked in the balance sheet. Therefore, the Net Book Value of a NPL is equal to:

$$\textbf{NBV} = \sum_{t'=1}^{n'} \frac{f'_{t'}}{(1+i)^{t'}}$$

Where *f'* represents the new expected cash flow after the change in the debtor's financial conditions, and *n'* represents the new time frame for the recovery of the amount due. The difference between GBV and NBV is the write down applied to the exposure:

$$\textbf{W} = \text{GBV} - \text{NBV}$$

5. Why selling NPLs?

"Banks must liquidate their NPL in order to raise funds to finance the real economy"

Ignazio Visco, Italian Bank Governor.

The fundamentals of the idea of the words expressed by the Italian Bank Governor are rather simple: damaged or legacy assets demand effort and management to maximize recovery. They are not only unproductive but also drag in financial, technical and managerial resources that would more profitably be devoted to assets that can deliver better returns and, above all, to the origination of new business. The short-term goal is to improve banks' balance sheets, reinforcing regulatory parameters respecting new requirements. By selling non-performing exposures, banks reduce value of Risk Weighted Assets, determining a consequent reduction of the minimum equity required by Basilea rules. Therefore, this process allows the lender to release risky assets, unlocking capital to be invested in more profitable activities.

The profit is generated also from the cost side due to the reduction of the direct expenses related to the NPLs management. Managing NPLs require large investments and internal reorganization to create non-core units focused on NPEs. The main costs are associated with the legal resources needed for legal procedures and specialized and trained staff. As we will examine later, high costs for internal managing forces companies to outsource operations. In addition, improving balance sheets by reducing costs generate a positive effect on the bank reputation.

If we analyze the sale option from a cash point of view, selling NPLs allows the bank to increase cash available; the higher the cash, the larger the investment opportunities the higher the profit opportunities. In the other European countries where the sale activity has been performed sooner, it became strategic for the overall economic recovery.

Finally, in these uncertain economic conditions, credit deterioration is likely to continue and going worst. Therefore, consolidating these positions as soon as possible allows the bank to avoid probable future loans' deterioration.

If all the factors just mentioned above are in favor of a rapid dismissing of non-performing exposures, there are also some opposite positions which advice about the risk associated with this operation. Recently, Ignazio Visco joined the cautions proposed by the Consob president Giuseppe Vegas, who advice about the risk of undersell toxic assets reducing the resources for granting credit and working only in the interest of the servicers or investors, which purchase NPLs at low price selling them later with important capital gains. This issue represents today one of the main risk associated with the NPLs' disposal: *"Specialized investors increase their profit margin by intensifying pressure on sellers (Banks) […] therefore banks need to implement a cautious approach to prevent underselling Non-Performing Loans".* Fabio Panetta, Banca d'Italia vice director expresses the same opinion adding that: "*[…] in the actual market context, rapid sales of Non-performing loans, would determine an undesirable transfer of resources to the restricted number of investors now operating the NPLs market and would erode the equity of Banks in a period in which the access to capital markets is still difficult*". The European Central Bank and Banca d'Italia recently strengthened the same idea: *"The Authorities evaluate independently each bank, analyzing the internal management procedures effectiveness, the recovery activities, coverage ratios and the percentage of Non-performing loans in relation to the total amount of credits. The aim is to define the most proper monitoring measures taking into account also the external environment in which financial institutions operate and not to force banks to rapidly and unconditionally dispose those toxic exposures to the market."*

5.1. NPLs' disposal strategy

The economic and financial crisis accelerated the increase in the amount of non-performing exposures in banks' balance sheets, negatively impacting capital requirements, profits and the cost of risk. Italian banks were mostly unprepared to face this issue and encountered difficulties in the internal valuations and in the disposal of NPEs. One of the most significant error was to focus primarily on the recovery of impaired loans, ignoring all the previous phases that could prevent a loan became non-performing (monitoring action) or the creation of an adequate information system capable to improve the internal management and favor deals with external operators. Indeed, the existence of an information gap between the issuer of bad debt and the potential acquirer in terms of data quality and transparency, created obstacles for the conclusion of deals. According to a recent analysis[33], the quality and the quantity of information about the NPL portfolio are considered more important than the price of the deal.

Which is the best strategy for an effective de-risking action?

First of all, the bank should understand the reason behind the NPEs issue. According to this, the lender should decide the actions to implement. In case of operational issue, the financial institution should review the entire internal process for the credit management. In case of an accounting issue, the purpose will be the improvement of ratios and the observance of capital requirements. Finally, in case of a strategic issue, the institution should redesign its business, focusing on its core business activities and evaluating different credit's management model (outsourcing, partnership).

A second fundamental step is the market analysis that the bank should perform in order to obtain a general overview of potential buyers. The information collected help banks to understand how buyers prefer to structure the deal, their expected rate of return and finally the price of the deal.

As underlined in the ECB guidance to banks on non-performing loans [34], the existence of different types of loans invites the bank to create a segmentation of portfolios in different clusters according to their peculiar characteristics. Loans can be grouped according to the

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[33] European investor insights survey, PWC, European Portfolio Advisory Group, March 2014.

type of borrower (corporate, individuals), geographic area or the coverage level. This segmentation allows the bank and the potential buyer to better evaluate each cluster, analyzing loans performances and defining a proper disposal strategy.

Once each of the previous steps have been performed, the bank defines the disposal strategy, which differ according to the outsourcing level; starting from the lower level the bank can implement one of the following options:

- **Internal management**: the financial institution creates an internal ad-hoc division (Non-core division). The main advantage is represented by the opportunity of directly monitoring the entire loans' management process. This strategy is viable only whether the bank has the proper structure in term of capabilities, resources and trained staff.
- **Outsourcing**: in this case, the bank decides to deliver the NPL management to external specialized operators or servicers through a partnership. This solution allows the institution to focus on its core business activities and to drastically reduce operational costs deriving from internalizing the management of the process.
- **NPLs disposal:** this option represents the highest outsourcing level strategy. It can be implemented in few time and allows the bank to improve immediately liquidity ratios and to increase the asset quality. The obstacles to the implementation of this strategy are the large price gap[35] due to the lack of efficient and effective information on the NPLs portfolio.
- **Bad bank:** this strategy implies the creation of a Special Purpose Vehicle, or SPV, in which are conferred bad loans of a single institution[36], or a pool of NPLs originated in different banks (a sort of public National Bad bank[37]). These structures are created to manage large portfolios of bad debt outside of banks' balance sheets. Bad banks can create scale economies in the management of illiquid assets, through the recruitment of NPL workout specialists. Bad loans portfolios are purchased at a value lower than the market price and this could represent a potential substantial loss for the selling institute.

[35] The difference between the bid-ask spread.
[36] See chapter 9, paragraph 4 on UniCredit FINO Project.
[37] NAMA in Ireland, SAREB in Spain, BAMC in Slovenia, Atlante in Italy.

While the first two strategies can be considered as a reconfiguration of the internal credit management process implemented by the bank, the other two better comply with the goals of the disposal strategy.

5.1.1. Internal management

"Banks can manage Non-performing exposures internally cause Italian Banks have capacities to generate earnings through the inhouse management"

Giovanni Sabatini, ABI[38] general director

To understand whether what Giovanni Sabatini stated at the NPL seminar of 15th May current year is true or not, we will try to analyze one of the possible strategy banks can implement to face NPLs' issue. The decision about managing non-performing exposures inhouse is strictly connected with the recovery rate associated to the toxic assets banks hold in their balance sheets. Therefore, we will try to understand how much banks can recover from NPLs and which are the possible factors that determine the variation in recovery rates among different loans' portfolios.

First of all, recovery rates for NPEs managed inhouse are higher than prices banks can obtain through sales to external investors. Furthermore, they change significantly from bank to bank. Nevertheless, financial institutions should work to find a balance between managing toxic assets internally or by selling non-performing exposures to third parties.

The following graph depicts the decrease in the average recovery rates in Italian banks during the period 2014 and 2015 (35%). The financial crisis was not the only factor weighing on the significant drop of that period. Another important component was the increase in the number of portfolios sold to external investors, which recovery rates are significantly lower than the ones associated to positions managed internally (23% vs. 47%). The main reason for this gap, is due to different valuation criteria adopted by the investors and their high profit expectations. External acquirers discount future expected cash flows with their target rate of return, while banks discount positions according to Accounting Principles.

[38] Associazione Bancaria Italiana.

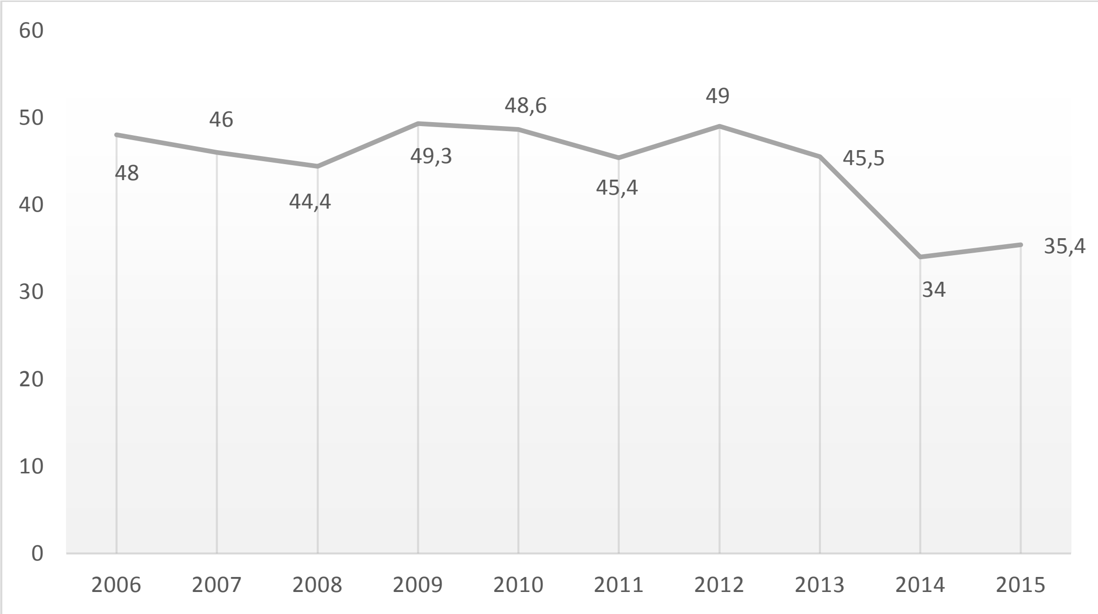


Figure 14: Decrease in the average recovery rates in Italian banks, (own elaboration based on data provided by Banca d'Italia, rapporto stabilità finanziaria 2017)

The other aspect to evaluate is the seniority of the NPEs. The longer the time toxic assets remain in banks' balance sheets, the lower the recovery rates associated to these positions (see graph below).

Recovery time	**% of recovery**	**% of recovery (secured loans)**	**% of recovery (unsecured loans)**
< 1Y	60,6	77,8	51,7
>1Y, <2Y	54,1	70,8	44,8
>2Y, <3Y	50,1	60,8	41,2
>3Y, <4Y	43,9	53,2	35,3
>4Y, <5Y	41,1	52,5	32,2
>5Y	29,8	38,8	23,7

Table 1: % of recovery in relation with recovery time, (own elaboration based on data provided by Banca d'Italia, rapporto stabilità finanziaria 2017)

These data can be read in relation to the percentage of NPEs closed[39] within three years after they became non-performing. According to the data disclosed by Banca d'Italia, the

[39] Sold or disposed by the Bank.

disposal process slow down after the explosion of financial crisis and the percentage of loans closed reached 34% from the 50% of 2006 causing banks to accumulate bad loans in their balance sheets.

Therefore, as we will deeply analyze in the conclusion of this work, decisions about managing NPLs internally or by disposing them to external investors depend both on the characteristics of the exposures (seniority, origin, data and information available) and on the capacity banks have in terms of staff, financial resources, time to manage them inside the borders of the financial institution.

5.2. Loan portfolio sales

The starting point for an effective loan portfolio strategy is represented by a comprehensive analysis of the national and international market of potential buyers. Defining a proper disposal strategy means determining all the factors and variables affecting the price operators are willing to pay for bad loans portfolios. Therefore, the same process will be analyzed from both the buyer and seller perspective.

5.3. Buyer side

The pool of investors in the distressed loans sector is diversified among a wide number of operators like Hedge Funds, Private equity Funds, Investment banks and specialized servicers. All these institutions are attracted from the vastness of the dimension and the high profitability of the market. In Italy, NPEs reached its maximum value of €341bn in December 2015, with a negative trend that showed a continuous increase in the amount of Non-performing exposures from 2008, raising about 287%[40] in the period 2008-2015. Finally, in 2016, the trend diverted and the total NPE amount has registered a small but significant reduction, reaching the value of €331bn in June 2016[41] and decreasing to €324bn YE-2016[42] (see chart below).

[40] NPL meeting, Fill the gap, Venice 16-09-2016.
[41] PWC, The Italian NPL market – positive vibes, December 2016.
[42] PWC, The Italian NPL market, the place to be, July 2017.

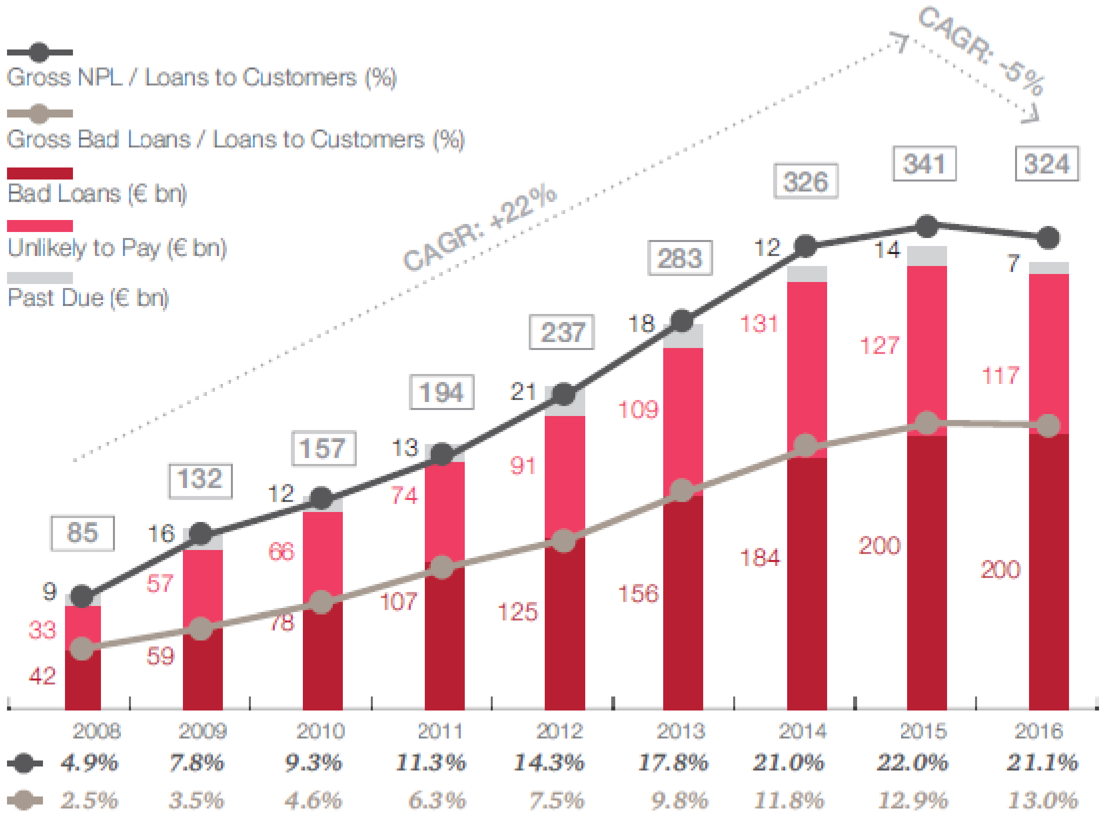


Figure 15: NPEs walk in Italy from 2008 to 2016, (PWC-The Italian NPL Market-The place to be, July 2017)

At the same date, c. 61.7% of the total amount of NPEs were bad loans, the worst category among the non-performing exposures, at the same level of YE-2015. If we look at the composition of bad loans we conclude that corporate and small and medium enterprise class represents the largest share of the total amount, 73%. From a geographical point of view, southern regions are characterized by the highest percentage of Gross bad loans on the total amount of customers' loans[43] (Gross bad loans ratio), drafting a context of heavier credit deterioration compared to northern regions.

Investors are aware that the time for banks to remove toxic assets from their balance sheets is now. The decisive input has come from national and international regulators, whose requirements are forcing financial institutions to address and solve this issue as soon as possible adopting proper disposal strategies. Furthermore, a positive trend of the Italian macroeconomic scenario[44] and a recovered economic stability, which is reducing uncertainties on assets value and increasing the probability of recovery, is moving foreigner investors to enter the Italian distressed debt market. Therefore, investors are moving away

[43] PWC, The Italian NPL market, the place to be, July 2017.
[44] See Chapter 1, Macroeconomic background.

from the other European markets like Ireland, Portugal or UK, which level of competitiveness has increased limiting their margin of profitability, to focus on the Italian attractive market. In 2015, volumes of bad loans' portfolios disposals increased approximately to € 19bn, more than doubled than the amount reached in 2014, while 2016 respected the predictions by closing about 43 transactions for a total amount of € 36bn[45].

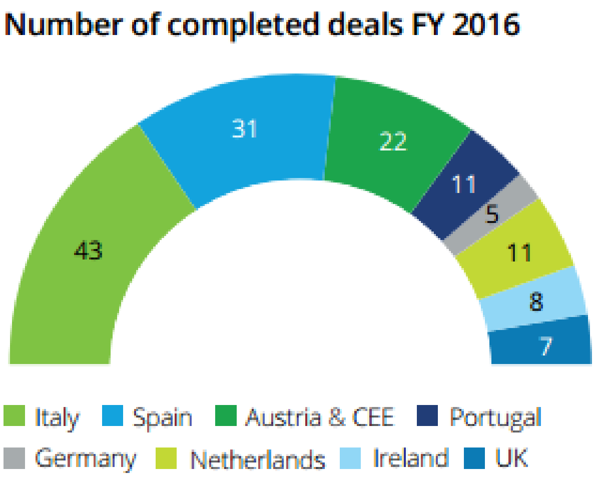


Figure 16: Number of NPLs completed deals in FY 2016, (Deloitte Uncovering opportunities in 2017. Deloitte Deleveraging Europe 2016-2017)

According to the predictions made by Deloitte[46], Italy and Spain will confirm their leadership in Europe as the most active markets for the number of deals in 2017. PWC[47] estimated 2017 volumes to exceed €60bn[48] and forecasted that, during this year, transactions will include also other categories of NPEs other than bad loans, like Unlikely To Pay and forborne exposures.

Similar studies highlighted slightly different numbers: the Osservatorio Nazionale NPL Market by Credit Village identified 119 transactions completed for a corresponding amount

[45] In Europe in 2016, 103 loans transactions were completed. Italy and Spain were the most active markets with overall 74 completed deals.
[46] Deloitte Uncovering opportunities in 2017. Deloitte Deleveraging Europe 2016-2017.

[47] PWC, The Italian NPL Market – The place to be.
[48] The most important transaction of 2017 is expected to be the MPS deleveraging of about €29.4bn.

of € 23.9bn of NPLs sold[49]. Finally, according to PWC, the total Gross book value of NPL transactions in Italy reached €34bn in 2016.

5.4. Operators and Servicing entities

To confirm what stated above, in 2016, the number of operators in the Italian NPLs market grew with new entrants like Hoist Finance or Kruk Group while, already existing investors like ItalFondario or Banca IFIS, reinforced their presence by concluding new deals. There are also new hedge funds entering the market like AnaCap or Algebris along with non-hedge fund asset management firms like PIMCO or DE Shaw and private equity groups like Bain Capital and Cerberus. The following tables group the top 5 domestic buyers operating in the Italian NPLs market with deals concluded in 2016 and 2017 respectively.

The market of domestic buyers in Italy is increasing its interest for Italian NPLs, despite the solid role still played by international operators. According to Banca IFIS[50], 59% of the deals in 2016 were concluded in domestic buyers' portfolio, while, in the first half of 2017, the same percentage reached 79.8%.

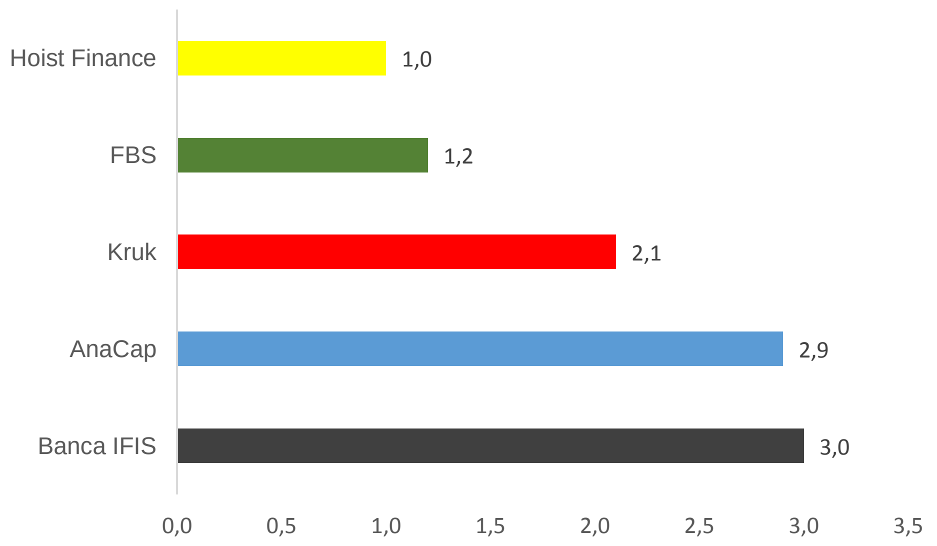


Figure 17: Top 5 domestic buyers in 2016 for volume of transactions (€bn), (own elaboration based on data provided by Banca IFIS, market watch NPLS, July 2017)

[49] The absence of official numbers released by counterparts involved in NPLs transactions due to the lack of transparency of the sector, results sometimes in contrasting numbers and values.
[50] Banca IFIS, market watch NPLS, July 2017.

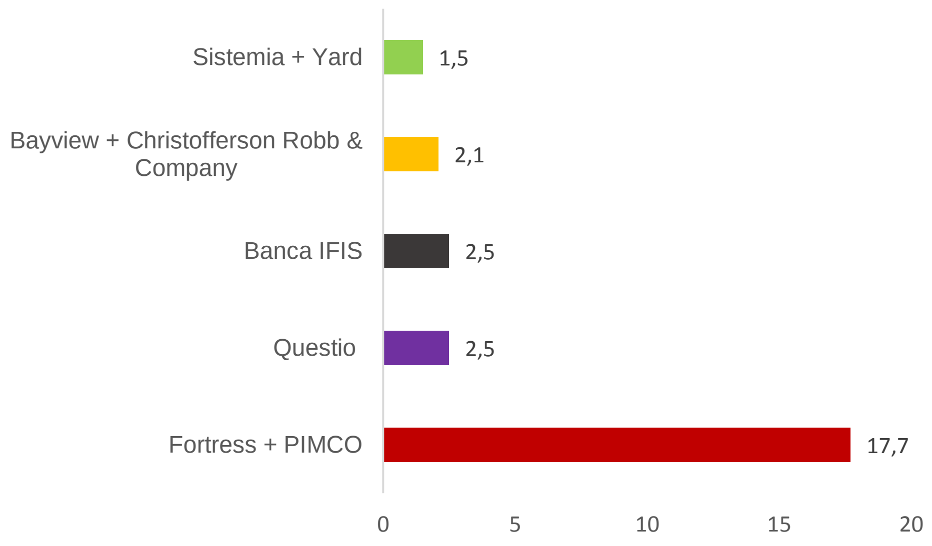


Figure 18:Top 5 domestic buyers (first half 2017) for volume of transactions (€bn), (own elaboration based on data provided by Banca IFIS, market watch NPLS, July 2017)

Another interesting area is the one of Servicers' entities. Often, when there are unsecured NPLs' transactions, buyer and servicing entity are the same group, but with the introduction of the GACS guarantee[51] which requires the existence of a third-party servicer for the conclusion of the deal, there is the potential for the creation of a NPL servicing market. Even if there is still room to develop a competitive service offering to support one of the largest NPL markets in Europe, this sector is experiencing a huge evolution. Their job is gaining importance thanks to the on-going increase in the volume of NPL transactions and with the growing outsourcing of recovery activities by banks, which usually lacks the necessary capabilities. NPL servicers plays a central role in improving recovery performances and reducing management costs. Even if the sector is recently experiencing horizontal integration and other mergers and acquisitions' operations[52], which are changing the shape and the size of the active operators, the market remains significantly unbalanced with the two largest servicers, Do Bank and Cerved Credit Management, managing respectively €77.2bn and €12.4bn, almost 60% of the overall amount of total bad loans AuM[53].

[51] See Chapter 7, paragraph 1 on GACS.
[52] Do Bank acquired 100% of Italfondiario (AuM €41.5bn) and Arrow Global acquired Zenith service (AuM €14.1bn) in 2016. KKR acquired Sistemia (AuM €4.6bn) and Varde acquired Guber (AuM €12.6bn) in 2017.
[53] Asset under Management.

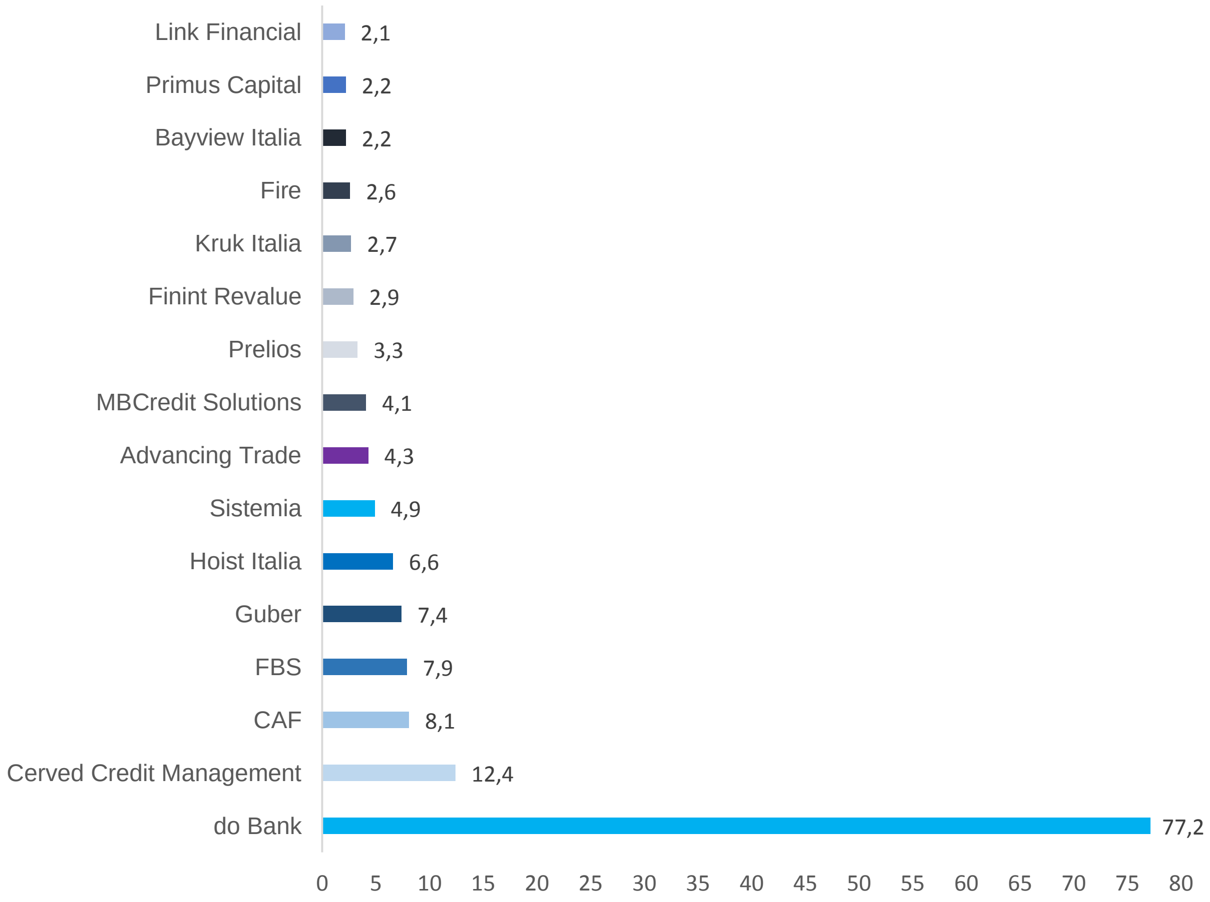


Figure 19: Servicers ranked for total Bad loans AuM (€bn), (own elaboration based on data provided by Banca IFIS, market watch NPLS, July 2017)

5.5. Why specialized investors invest in distressed debt market?

In such a way, investing in the Italian NPL market means bet in the economic recovery of the country. Investors and operators think that the overall economy in Italy reached its lowest level and believe that now it is going to improve. The most recent macroeconomic forecasts on GDP, inflation and unemployment rate sustain their assumptions[54]. Therefore, the long-term outlook and the ability to exploit and recognize the right moment to enter the market is fundamental to obtain the best investment's output.

From buyers' point of view, the principal revenue's source of the entire operation is represented by the amount recovered from impaired loans. Therefore, one of the first option is to renegotiate with debtors the terms of the contract in an extra judiciary way (forbearances[55]) in order to allow them to fulfil their obligations and repay the entire amount due. Recently, to sustain the positive vibe on the distressed debt sector, investors like hedge funds and private equity funds have increased the amount of money to invest in non-core assets or created dedicated divisions specialized in non-performing loans.

The reader might wonder why these operators would invest in a market which assets have such a high likelihood of defaulting. The answer is immediate: the more risk investors take on, the higher the potential reward they can make. In an environment characterized by near-zero rates, high percentage yield is moving investors' capital to banks' bad loans markets. Currently, toxic assets' transfer price is very low compared to the gross book value. At the same time, investors have strong bargaining power towards banks, which are in such a way forced to clean their balance sheet regardless the capital loss they face. In addition, the renewed positive forecasts for the Italian economy increase the probability that distressed companies and the relative distressed debts, turn to be viable and performing, generating big upsides for investors. Because this sector offers usually high-percentage return, even small investments can contribute heavily on the investor's overall return on capital.

The choices of the types of non-performing loans to invest in, depends, on one side, on the probability of recovery and, on the other, on the relative ease of transfer for banks. Nevertheless, another important factor that do not directly depends on buyers or sellers' preferences is the Expected Default Frequency, or EDF, which is an estimate of the Probability of Default of the counterparties of a loan in the forthcoming year. Therefore, the

[54] See Chapter 1 on Macroeconomic background.
[55] See Chapter 3 on EBA definitions.

loans with higher PD (probability of default) will also be the principal object of transactions between banks and investors. The reason is related to the necessity for banks of removing form their balance sheets more problematic assets because of the costs related to their maintenance both form a regulatory and an economic point of view. In addition, according to data released by EBA in the risk assessment of the European Banking System, the largest exposures of European banks are the one towards the real estate sector, followed by the Manufacturing industry and wholesale and retail trade, which represent two of the riskiest sectors in terms of probability of default. If we look at the following table, we can see that, for Q2 2016, the riskiest sectors were mining and quarrying and education with a 1-year PD of 1.87% and 1.38% respectively. However, according to the same source, the average European exposure of banks towards those sectors was basically insignificant.

Sector	Probability of Default (PD)
Real estate activities	0,13
Manufacturing	0,22
Wholesale and retail trade	0,25
Construction	0,66
Transport and storage	0,26
Professional, scientific and technical activities	0,41
Other services	0,01
Electricity, gas, steam and air conditioning supply	0,11
Administrative and support service activities	0,35
Agriculture, forestry and fishing	0,45
Accommodation and food service activities	0,08
Information and communication	0,32
Human health services and social activities	0,15
Mining and quarrying	1,87
Water supply	0,27
Arts, entertainment and recreation	0,19
Education	1,38
Public administration and defence, compulsory social security	0,01

Table 2: Sector's probability of default (PD), (own elaboration based on data provided by EBA, "EBA Report on the dynamics and drivers of Non-Performing exposures in the EU Banking Sector", 22nd July 2016)

Clusters that attract more specialized operators and investors are unsecured retail loans, because of the facility of transfer and therefore the limited capital loss generated from their disposal, followed by the Credit Real Estate (CRE), which appeal has increased during 2016 boosted by the Italian Real Estate market recovery that recorded a double-digit growth in the first half of 2016. The growth was mainly driven by sales of residential properties, +22.9% from 2Q 2015 to 2Q 2016 and industrial properties +28,7% in the same period, for a total sector increase of about +22%[56]. Nevertheless, the large presence of secured loans in the Italian NPLs market and its evolution is increasing the appetite of investors, who are showing interests towards all the categories of bad loans and overall, the Italian NPL market is moving towards more complex deal structures involving small and medium-sized business loans, leasing and mixed portfolios.

5.6. Challenges for investors of distressed debt market

Investors should also consider some significant challenges and potential drawbacks.

5.6.1. Bid-Ask Spread

The first one and even the most limiting is the price of the portfolio transferred from banks to buyers. NPL pricing is an elusive concept because each portfolio can include different types of loans ranging from secured or unsecured, corporate, SME, mortgage, leasing or consumer (families), retail, real estate or Commercial Real Estate categories. Buyers apply a discount rate always higher and conflicting with the price bidders ask (bid-ask gap).

Until 2015, banks offered their non-performing loans to the market but were forced to quit the deal because of the disappointing offers. After all, banks want to minimize capital losses while buyers want to reduce the risk they carry on. These opposite point of views, have gradually created a gap that in the past has always discouraged the conclusion of these deals. Even if the introduction of new National and International rules like GACS[57], the lesser claims promoted by banks on the transfer price, the reduction of the information asymmetries between buyers and sellers on the data of non-performing loans sold within the portfolio and the decrease of the overall time of the disposal process is reducing the bid-

[56] Data provided by PWC, the Italian NPL market, Positive Vibes.
[57] See chapter 7, paragraph 1 on GACS.

ask spread, the difficulty in setting a common transfer price remains one of the biggest challenges to be addressed.

But why the divergence between balance sheet prices and market prices is so great?

At first instance, the bid-ask spread is the result of different criteria adopted by sellers and buyers for the assessment of bad loans. The loans included in banks' balance sheet are recorded according to the common accounting principles. According to IFRS 9, the value of the loan should be equal to the present value of the expected future cash flow. For this purpose, banks must use the original actual interest rate of the transaction which ranged in average around 3.5-4.5%[58]. Furthermore, financial institutions book indirect costs for NPLs management in the year they occur, while external investors detract indirect costs from the NPLs' net value, hence decreasing their prices. The same approach can be applied also to the assessment and evaluation of NPLs. To estimate the actual value of a troubled loan, a bank usually calculates:

- The effectively recoverable amount computed taking also into account the existence of guarantees;
- The expected time horizon for the recovery which is usually different from the one resulting from the contract;
- Direct costs related to the management of the non-performing loans (legal expenses) to be deducted from the recoverable amount;
- Should not consider indirect costs like cost of personnel because these costs will be recorded in the income statement of the bank once they effectively arise.

On the other side of the deal, Investors have a different perspective and use different tools to evaluate NPLs:

- First of all, they have to take into account the information asymmetries on the credit market; due to this issue, specialized operators apply a sharper cut to the banks' estimation of the expected recoveries;
- Secondly, they take into account also indirect costs;
- Finally, they apply a higher discount rate, usually around 12-15%, which is also burdened by a risk premium.

[58] Data as of June 2016.

5.6.2. Information Gap

As also stated above, the information asymmetries between banks and specialized operators represent another obstacle to face in the distressed debt market. Currently, the importance of transparency and information is not properly perceived both at private and public levels.

Information regards specifically the possible recovery rates. An adequate Information technology system[59] should be used by banks to provide more accurate and timely information about the characteristics of the credit exposures (presence and features of collateral, information about debtor position, terms of the loan) within the selling portfolio. These systems could enable the investor to perform a more complete analysis of the portfolio to be purchased, minimizing costs related to the investigations to be performed and reducing the overall time needed for the due diligence analysis. Another good solution is represented by the NPL securitization into tranches reflecting their asset quality which could help to improve demand.

5.6.3. Cost of capital reduction

There are different ways to reduce the average cost of capital related to NPLs' transactions. A possible solution is represented by financing the purchase of non-performing loans through a leverage mechanism. Using debt instead of capital allows operators to carry a lower risk, and this is translated into a considerably lower discount rate to apply to the book value recorded in banks' balance sheets, being lower the overall risk charged on acquirers. At the same time, the use of a lower amount of capital increase the related rate of return.

5.6.4. The recovery time frame

Reducing the overall time frame related to the recovery process of NPLs means lesser uncertainties on recoveries and lesser risks charged on investors and therefore a higher transfer price. According to a research conducted by Banca d'Italia, a reduction in the

[59] See Chapter 4 on ECB Guidance on non-Performing Loans.

recovery time frame of about two years would increase price of the NPLs' portfolio of about 10p.p. This is true especially in Italy, where average time needed to complete an NPL transaction is from 3 to 4 times longer than the other European countries average (see chart below), the intervention of the Government is fundamental to tackle and solve this issue.

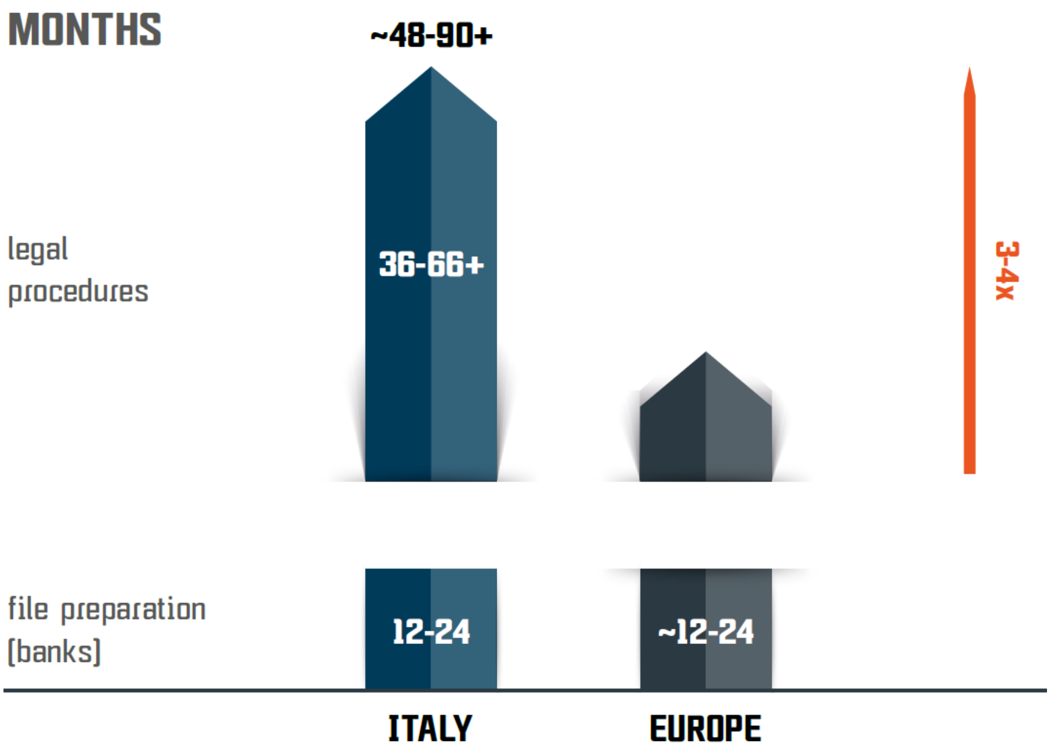


Figure 20: Average time needed to complete a NPL transaction: Italy and Europe compared, (Banca IFIS Area NPL, "Fill the gap, NPL meeting", Venice 16th September 2016)

Banca d'Italia performed an analysis with the purpose of quantifying the impact of the recovery time on the price investors would be inclined to purchase NPLs. Assuming an Internal Rate of Return equal to 20% for discounting expected cash flows, the analysis demonstrates how only one-year difference affect significantly the price of NPLs in percentage to their GBV.

Recovery time (Years)	Price (% of GBV)
1	36,3
2	29,8
3	24,4
4	19,8
5	16,1
6	12,9

Table 3: Recovery time of a NPL portfolio in relation with its price, (own elaboration based on data provided by Banca d'Italia, rapporto stabilità finanziaria 2017)

As we can see, the longer the recovery time of an exposure, the lower the price investors are willing to pay for it.

The following paragraph provides a useful example of the difficulties related to the price setting of a secured loan exposure, which collateral is a real estate property.

5.7. Example: setting the price of a secured loan

Real estate execution procedure consists of three different phases: the foreclosure, the sale and the distribution of proceeds. It involves three individuals: the creditor, the debtor and the executive body. The judge set a minimum price based on the experts' appraisal and in the following step, during the auction, bidders make a binding offer to adjudge the property. According to data collected on a sample of execution procedures from 2011 to 2015, the average time frame between the appraisal to the auction's procurement was of about 1000 days (2 years and 9 months). The entire time frame does not consider the time granted to the successful tenderer to settle the amount offered, which usually varies from 10 to 120 days on average. The main downside is represented by the resulting value loss meaningfulness of the initial estimation. This value deviation is the result of the real estate market trend and the overall economic framework, which influences the collateral value with an average discount of about 36%[60]. The final price is also influenced by the number of auctions needed to complete the process, since that at the third auction, the price is

[60] NPLs secured in italia: profili e problematiche valutative dei soggetti specializzati nell'acquisto mirato e nella gestione giudiziale. Marzo 2016 Carlo Felice Maggi, Dipartimento di Management Università di Torino, Stefano Angelino, Board member, SUITS NPL Tailored investments.

discounted, on average, by 44%[61]. Another factor to consider, are the criticalities typical of the expropriation procedure, which creates issues especially in case the property to be executed is the first and unique house of the debtor. In this case, often, the owner decides to hinder the execution of the house by delaying the exoneration or also damaging the property, without considering that its own interest would be the fast execution of the house in order to guarantee the highest selling price.

Therefore, for a specialized operator, the elements to consider for the correct price setting of mortgage credits are a proper quantification of the purchase price of the collateral and an estimation of the time frame needed to complete the process. To perform a good analysis, buyers need to use personnel specialized in the real estate market, whose task is to verify that the conditions and the characteristics of the assets are in line with what emerges from documents. Once the inspection is performed, the specialized operator calculates the Open Market value (OMV), which corresponds to the asset's value in case of free sale promoted by the original owner. The second step is represented by the due diligence, which aim is to analyze deeply all conditions and risks related to the credit position the investor is going to purchase. This analysis is fundamental to verify the existence of anomalous elements that could slow-down or hinder the recovery process. Therefore, through the weight of the objective and subjective aspects of the real estate execution procedure, the specialized operator is now able to estimate the Judicial Market Value (JMV). The last phase for the estimation of the offering price involves the computation of time, which takes into consideration the number of auctions needed and the time between them.

Studying this simple but significative example, we can catch the trade-off of investing in secured loans. Even if they are safer and yield higher returns, the length of the execution procedure and the difficulties of Italian bureaucracy reduce the appeal of these exposures. In the conclusions, I will try to sum up these considerations for creating a sort of guided path for each loans' class.

[61] NPLs secured in italia: profili e problematiche valutative dei soggetti specializzati nell'acquisto mirato e nella gestione giudiziale. Marzo 2016 Carlo Felice Maggi, Dipartimento di Management Università di Torino, Stefano Angelino, Board member, SUITS NPL Tailored investments.

5.8. Seller Side

The expectations of sellers are:

1. Obtaining a high price by the deal, minimizing in this way the bid-ask spread and the consequent capital loss;
2. Respecting the regulation, cleaning balance sheet and freeing capital to boost core activities;
3. Safeguarding the image of their institution.

By simplifying the process, it is possible to identify two macro-phases related to the NPL disposal procedure. The first one is an internal process aimed at collecting data that allows for the classification of bad loans and the creation of different portfolios[62]. This stage is very expansive in terms of resources and time needed. The second phase is the one related to the counterparts' relationship and the definition of the terms of the deal.

The non-performing loans' classification is useful to reduce the bid-ask spread. In fact, clusters are analyzed through specific indicators like coverage ratio, the presence and the characteristics of collaterals or the ageing (how long the portfolio is classified as non-performing) and finally rated, with a grade that reflects the information resulting from the indicators and the expected realizable value.

Once the portfolio segmentation is completed, the bank proceeds with a due diligence analysis, which consists on a deep analysis of all the documents related to the underlying loans. Thanks to this procedure, the bank can perform a preliminary economic evaluation of the portfolio and define the minimum transfer price.

The final step is the price setting. To define the transfer price, the bank needs to estimate all the expected future cash flows, which are the result of objective elements like the Gross Book Value or the presence and the characteristics of collaterals, and subjective elements such as disposal strategy or the collaterals' evaluation.

The definition of the NPLs' disposal strategy depends on the characteristics and the size of the portfolio sold; in case the seller decides to maximize the volume of the toxic assets to include in the portfolio, bank's aim will be to minimize managements' costs and improve capital and asset indicators. In case the seller decides to focus on the economic efficiency

[62] See Chapter 4 on ECB guidance on non-performing loans.

of the operation, the aim of the bank is to reduce the time needed to complete and conclude the deal and minimize the negative economic impact of the transaction. The balance of these two different strategies is the result of an accurate management decision; in fact, in order to positively connotate the NPLs disposal, the bank should choose a quantity of toxic assets sufficient to demonstrate to the market the willingness to clean its balance sheet but, at the same time, safeguarding the economic viability of the operation.

The year 2016 ended with some relevant events related to NPLs' portfolio disposals in the Italian banking sector, which once again leak a prudent but comforting optimism. The most relevant operation is the definition of the UniCredit's FINO project, a 17.7bn NPLs disposal[63], which took place mainly in 2017. Even the other main Italian financial institutions are moving towards the same direction: Banco BPM stated in its industrial plan the willingness to dispose € 8bn of toxic assets within 2019; Carige, BNL, Intesa San Paolo, BPER and Banca Popolare di Bari have at least concluded one disposal during 2016. Monte dei Paschi di Siena represents certainly the most interesting and the most awkward situation. The bank planned to sell a unique portfolio of about € 28bn within 2017. The expected transfer price could be around 25% of the Gross Book value, while the most ancient bank in the world, at the end of 2016, booked € 29.4bn of non-performing loans at 35.3% of Gross Book Value. This means that, whether the transaction would take place at this condition, the bank would face a loss of about € 3bn with a negative impact on the CET1 ratio of c. 300bps. The following tables summarize the volume of transactions for the top banks originator in Italy in 2016 and first half of 2017 respectively[64]. UniCredit thanks to FINO project ranked at the top placements, while MPS, with the conclusion of the deal related to the disposal of about €28.5bn expected for the end of 2017, will become the top originator.

[63] See paragraph 4 chapter 9 on FINO Project.
[64] Data provided by Banca IFIS, Market Watch NPL – The Italian scenario, July 2017.

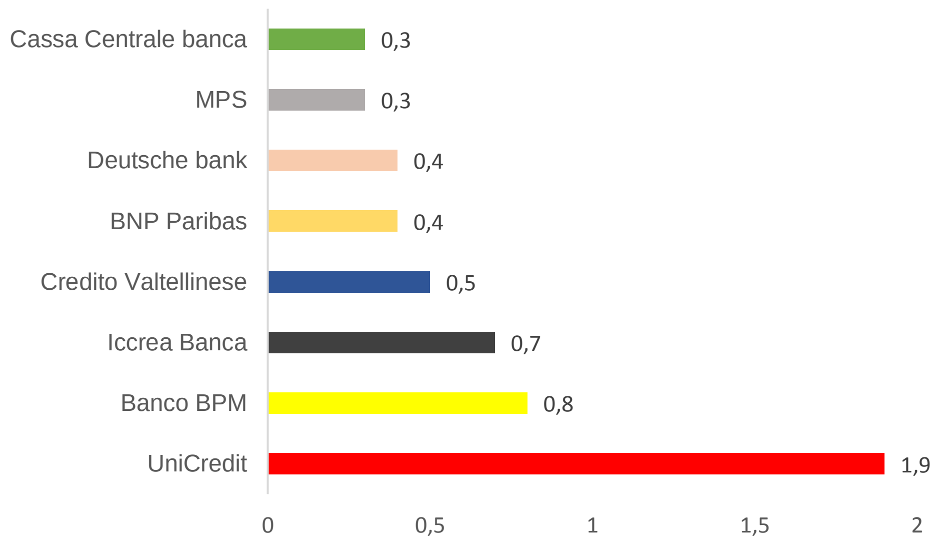


Figure 21: Top originators ranked for total bad loans transactions (€bn) YE 2016, (own elaboration based on data provided by Banca IFIS Area NPL, "Market Watch NPL The Italian scenario, special edition NPL meeting", September 2017)

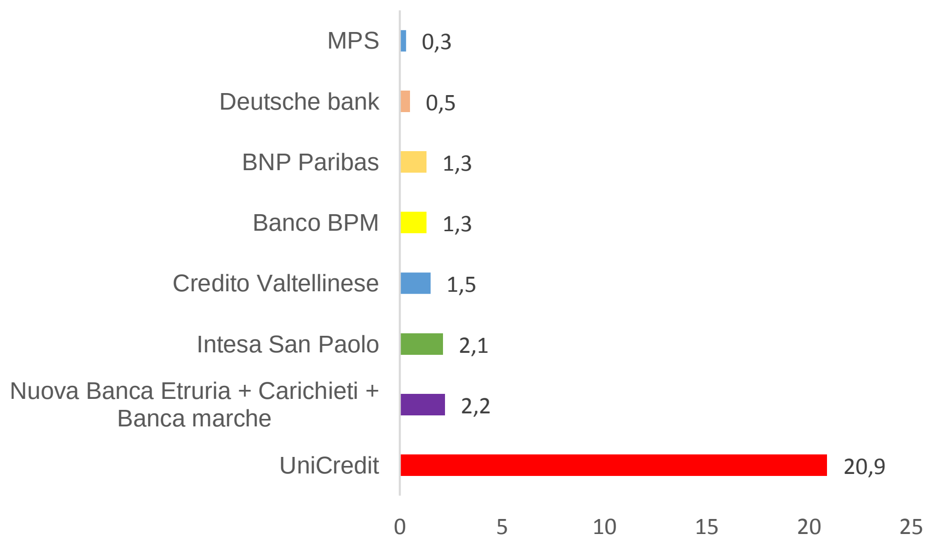


Figure 22: Top originators ranked for total bad loans transactions(€bn) first half 2017, (own elaboration based on data provided by Banca IFIS Area NPL, "Market Watch NPL The Italian scenario, special edition NPL meeting", September 2017)

6. Bad Bank

A bad bank scheme is a well-established banking crisis management tool, repeatedly used in the past throughout different financial systems. Bad banks often are not banks; this is because in order to maximize recovery, managers of bad banks need to be freed from the constraints of banking regulation. The essence of the bad bank technique consists in the separation of a bank's troubled assets (non-performing assets) from the performing ones. It is important to underline that the bad bank is not, by its mere creation, a solution to the problem posed by the non-performing exposures; the assets leave the banking sector but do not vanish. The risk is transferred to someone else, which is usually the taxpayer.

A Bad bank is an Asset Management Company, which uses its dedicated and skilled staff, its capabilities and its skills to recover as much as possible of the total amount of NPLs. They can be financed by private investors, by the Government or by both.

Asset management Companies can perform a passive or an active role in the disposal process, by investing directly in troubled companies and promoting a business restructuring[65] and by negotiating with debtors a new recovery plan. Usually public Bad Banks[66] offer less restrictive conditions to debtors, giving them more time to restore their financial position. The autonomy in the recovery process is also represented by the possibility of selling single positions or creating portfolios, by implementing securitizations processes[67] and by selling the restored portfolio to the originator or to other third parties. Sometimes the bank that transfer toxic assets (originator) become an investor of the Bad Bank, participating to potential upsides.

The purpose of this vehicle is to liquidate the troubled loans once the better market conditions will tighten the gap between the nominal value and the market value of the toxic assets. In the best-case scenario, the bad bank succeeds in recovering the total amount of bad loans at a price that is higher than the one paid to the bank to acquire the NPL portfolio. In the opposite situation, if the market conditions do not allow the vehicle to achieve its goal, the bad bank is not able to repay the money offered by the investors. If the Government is one of the investors, the money deposited weight on the government budget, increasing public debt. This represents one of the reason that discouraged the development of public

[65] In this case the servicer act as an advisor.
[66] Public Bad Bank are vehicles which main investor is the Government.
[67] See next paragraph on securitization.

or national Bad Banks. Conversely, one of the main benefits deriving from a national Bad Bank is the reduction of the price gap[68]; hence the transfer price is lower than the book value (usually around 41% of total NPE[69]) but higher than the market price (usually around 20% of gross value of the exposure). The final purpose is to minimize the losses that banks would record in case they sold troubled loans at the market price. The banks interested in the project immediately take a loss, when they transfer bad loans because they sell at a price lower than the book value. As a result, they could either absorb the loss in their capital buffer or proceed to a capital increase[70].

The reasons justifying the presence of the government as an investor or a form of guarantee in these transactions are given by the imperfections of the NPLs market. The failures of the market are represented by information asymmetries due to the absence of easily accessible and comparable data on the loan characteristics, the debtor and collaterals, and the illiquidity of the NPLs market, which creates a first mover disadvantage to sell into the market.

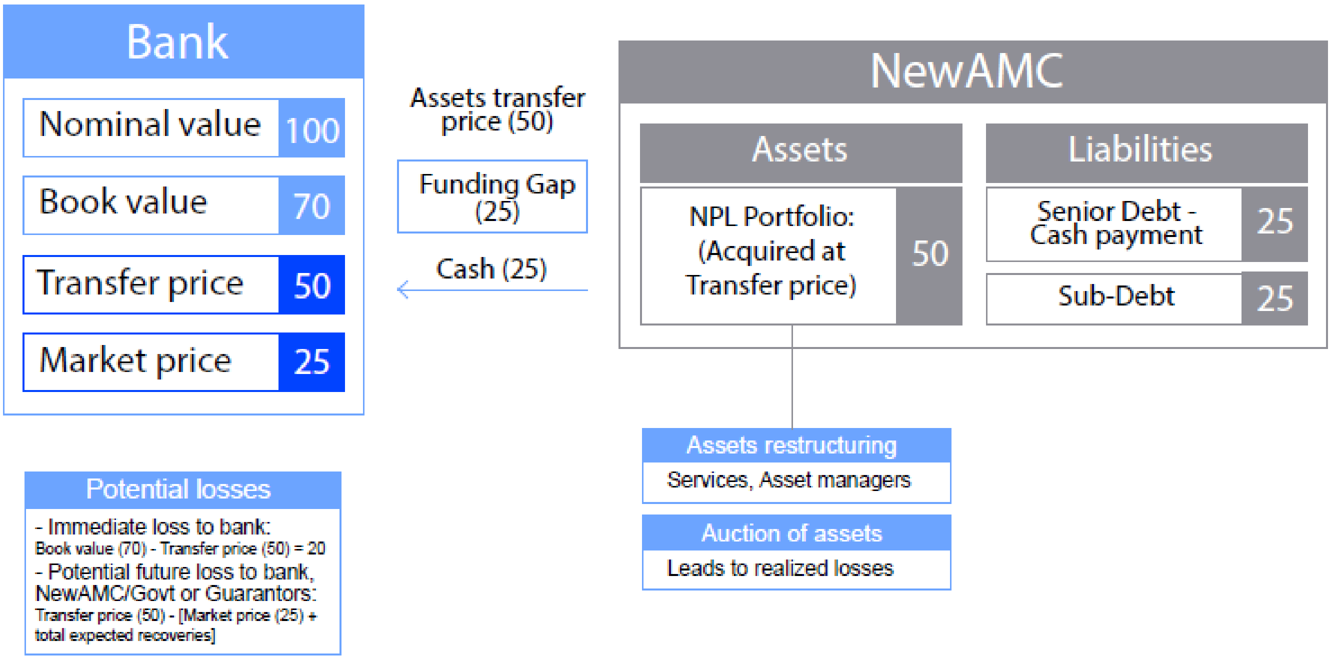


Figure 23: An example of the functioning of an Asset Management Company

The following example based on the above figure allows us to better understand the issue of defining a selling price for the NPL portfolio. Starting from the left, let us imagine that the

[68] See paragraph 3, chapter 7 on Atlante Fund.
[69] Banca d'Italia, Financial stability and monitoring, Note No 3.
[70] UniCredit decided to implement a €12bn capital hike in parallel with the FINO project disposal.

bank owns a NPL portfolio with a nominal value equal to 100, a price to book value equal to 70 and a market price of 25 due to unfavorable economic conditions. If the bank would decide to sell directly the NPL portfolio to the market, it would register a net loss equal to 45 (difference between book value and market price). The creation of an AMC, on the right of the figure, partially solve this problem by fixing a transfer price lower than the book value but higher than the market value. The value of the transfer price (Long term economic value, or LTEV) reflects the asset value in case of a stabilization of the financial system. The LTEV is computed as follows:

LTEV = Market price + total expected recoveries – operating costs

At the transfer date, the bank takes a net loss given by the difference between GBV (70) and transfer price (50) (in this example loss = 20).

One of the objective of this process is to provide immediate liquidity to the bank. Therefore, the AMC uses cash to pay NPL portfolios. To fund this transaction, Bad Bank usually issue debt in two macro classes:

- **Senior debt** offered to private and institutional investors used to fund the market price of the acquired NPL portfolio;
- **Subordinated debt** used to cover the differential between the market price and the transfer price; this class of debt is usually secured by the Government.

An alternative solution to the public or national Bad Bank, is the private Bad Bank. The main shareholders of this SPV are funds or specialized operators in the NPL market, while the originator can hold only minority shares. Through this structure, investors have sufficient contractual power to enter in the governance of the insolvent companies and activating restructuring plans. At the same time, banks transfer their credit risk to the AMC changing their status from creditors of the troubled companies to creditors of the SPV.

6.1. Securitization

A private Bad Bank could also opt for the securitization of credits in different Notes, diversified in tranches according to the risk (senior, mezzanine, junior) and then assigned to banks as a representation of the assets transferred. Securitization is a financial technique that consists in the transformation of a financial asset in a tradable financial security. This technique was born in the U.S. and was implemented for the first time in Italy in the 90s.

Credit securitization involves the pooling and repackaging of loans, such as mortgages, leases or credit card receivables, and the conversion of them into debt securities. The repackaged assets are put together into portfolios and sold to special purpose companies, which fund the acquisition by issuing debt securities to investors. The investors then receive cash flows from the underlying assets. Credit securitization process is therefore structured in four phases:

1. The bank creates homogeneous clusters[71] in which are conferred credits with similar characteristics;
2. The originator sells these portfolios to a Special Purpose Vehicle, or SPV, specifically built for the NPLs disposal;
3. The issuer creates tradable securities (ABS or Asset Backed Securities) representing a stake in the assets associated with the portfolio, selling them to interested investors with a rate or return;
4. Rating agencies assigns a grade to the different tranches issued by the SPV according to their level of risk.

For what concerns the decision about the portfolio object of transaction and the securitization process, the regulator concedes the bank to autonomously decide the composition of the above-mentioned portfolio[72]. The decision about the types of loans to include in the cluster directly influences the transfer price and the rating assigned. The presence of collaterals makes loans more attractive for investors and therefore more easily to sell. In fact, should a debtor ceases payments on his asset, it can be liquidated to compensate those holding an interest in the debt. At the same time, however, even though the securities are backed by tangible assets, there is no guarantee that the assets will maintain their values in case the debtor ceases to pay.

[71] See chapter 4 on the ECB guidance on non-Performing loans.
[72] See chapter 4 on the ECB guidance on non-Performing loans.

7. Italian legal and regulatory framework

During the year 2016, the Italian Government implemented several measures and improve current rules to allow for a better regulation of the Italian NPLs market. Benefits are expected to be effective since 2017.

7.1. GACS

The first step towards the update of the Italian regulatory environment was made in February 2016 with the law decree n. 18/2016 on GACS (Garanzia Cartolarizzazione Sofferenze). It consists on a provision for a government guarantee aimed at facilitating the disposal of NPLs.

The decree established the conditions according to which the guarantee can be offered:

1. Assets securitized must be classified as bad loans;
2. Assets must be disposed by Italian banks;
3. The senior tranche must receive a rating equal to or higher than investment grade.

The guarantee offered through the GACS has a duration of 18 months and can be granted only for the coverage of interests and capital payment obligation on the senior tranches of secured bad debts issued by a Special Purpose Vehicle created for the transaction. The transfer price must not be higher than the Net Book Value booked in banks' balance sheets. GACS was used for the first time in October 2016 by Banca Popolare di Bari, which disposed successfully retail and corporate bad loans for a total GBV of € 480m. The bank benefited from the State guarantee for the senior investment grade tranche of bad loans of € 126.5m.

The main aim of the GACS is to unlock the NPLs' market, facilitating the financing of the NPL purchases and supporting the bad loans securitization procedure. This regulation is aimed at increasing liquidity in the market by facilitating leverage. Even if GACS was strongly desired by banks, servicers and investors of the NPLs' market, it raised some concerns in relation with the high costs and the complexity of the procedure which could further extend the total time frame of the operation. Therefore, although GACS must be considered a positive and useful instrument, it cannot be the only "weapon" the Italian government should implement to improve the Italian NPL market.

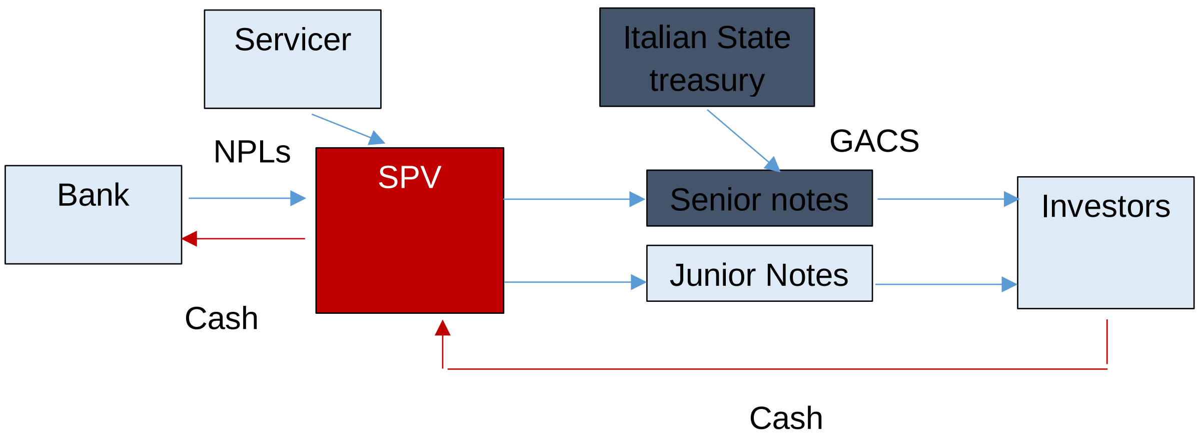


Figure 24: Bad Bank and securitization, how the GACS influences a NPL transaction.

7.2. Reforms

Since 2015, the Government has targeted some systematic issues related to the Italian NPLs market with the introduction of new rules. The Government tried to reduce the total time frame and to simplify the whole recovery process by encouraging the use of digital documentation The State also provided measures like the digital registry of insolvency proceedings and foreclosures with the purpose of simplifying the auction process. Other amendments and new laws introduced includes beneficial tax treatments of banks' loans provisions, amendments on bankruptcy proceedings aimed at accelerating recovery process. Recently, the government with an amendment to the law 130, enlarged the effectiveness of the securitization process by allowing Special Purpose Vehicles to extend the Asset-backed securities to all the non-performing exposures (Bad loans, Past due, UTP).

7.3. Atlante Fund

The Atlante Fund was designed with the purpose of creating a market for the NPLs in Italy, and a rescue for troubled Italian banks seeking for recapitalization. Its creation was announced in April 2016, generating positive impressions especially by the International Monetary Fund, which looked at this initiative as a concrete action to tackle the non-performing loans issue affecting the Italian banking system. Its creation was promoted by Mr. Alessandro Penati, President of Quaestio Capital management SGR and blessed by the Italian government, which participation to the fund, through Cassa Depositi e Prestiti, is limited to only a small stake (around € 500m). The total amount of money conferred in the fund, c. € 4.25bn, has been provided by many banking foundations and insurance companies like Banca Popolare di Milano, Banca Popolare dell'Emilia Romagna and the two biggest Italian lenders Intesa San Paolo and UniCredit with an investment of about € 1bn each.

Atlante looks like a private equity fund, which satisfies its investors not providing strong returns, but by attempting to restore stability and increasing the confidence in the Italian banking system. As mentioned above, the main activity of the Atlante Fund is sustaining recapitalization of troubled banks through direct investments; however, a part of the fund has been used to revitalize the Italian NPL market and to adequate the volumes of bad loans' transactions to the other European countries. To reach this goal, the Fund has purchased secured toxic assets, especially junior tranches, offering an amount between the current market price (around 20% of nominal value), and the Book Value (around 40% of nominal value). Atlante has no mandate to exercise management power over the banks or to elect their board members, acting therefore as a passive investor.

The image below provides a simple graphic representation of the Atlante functioning.

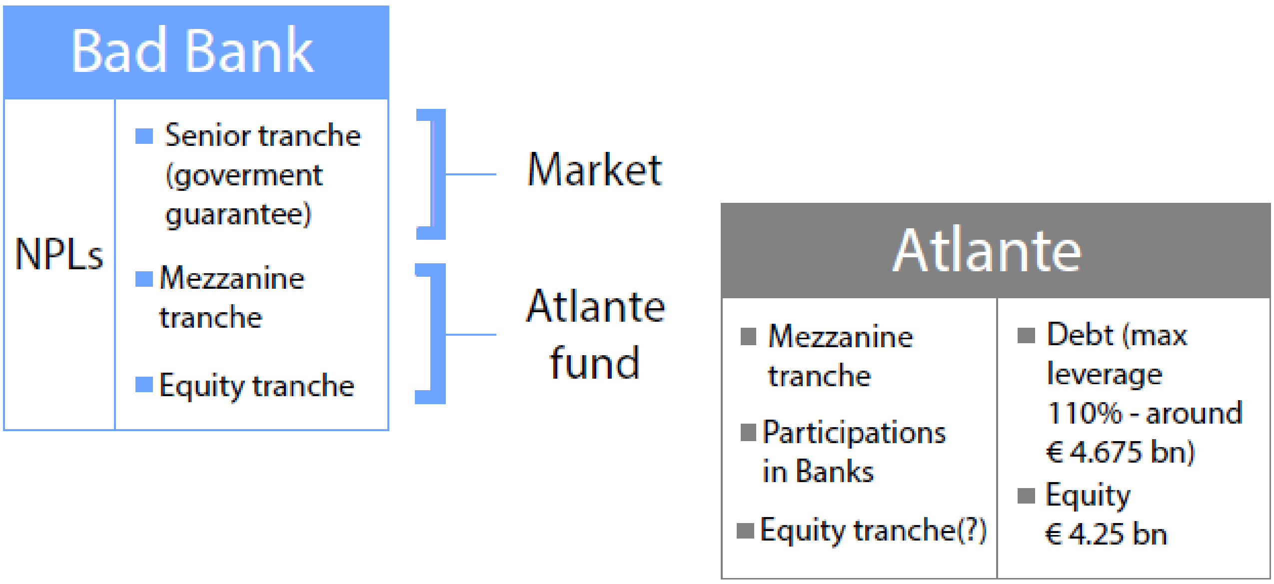


Figure 25: Atlante functioning

According to Mr. Penati, Atlante is playing a role to reduce the Bid-Ask spread in the Italian NPL market, that is, stimulating competition and reducing information asymmetries with the purpose of pushing up the current value attached by the market to these securities. In fact, as of today, the NPLs are valued less than a half than their book value. The picture below provides Atlante predictions about the spread reduction; how and whether the spread reduction will be achieved is difficult to predict and depends on several factors such as the on-going change in national and international regulation and the effective impact of the Atlante Fund actions. The final target price expressed as a percentage of the nominal value of a NPLs' portfolio, is here split into the different factors that should determine the increase to 33.8% of the nominal value.

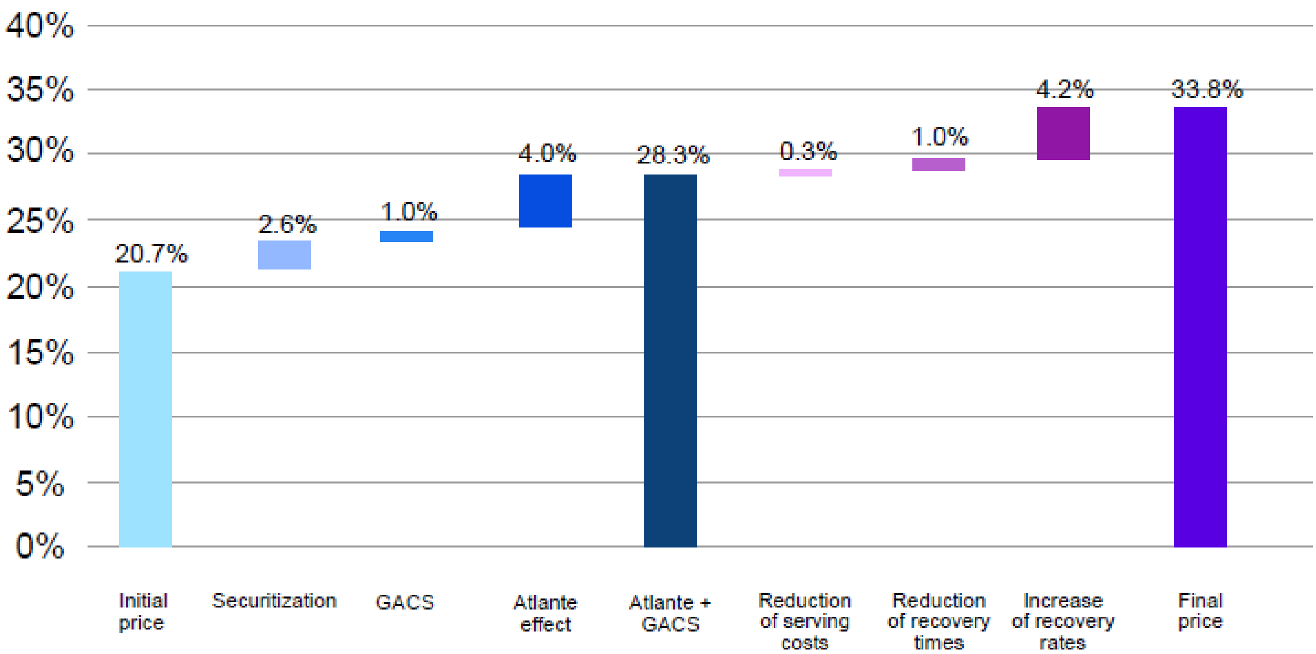


Figure 26: Impact of different contributors increasing the price of a NPL portfolio transaction

One of the most significant impact is determined by the securitization process (about 2.6%); the reason is given by the risk splitting into different categories, which allows investors to invest only in the tranche that reflects their risk propensity. The GACS (Garanzia sulla Cartolarizzazione delle Sofferenze) and the "Atlante effect" will create value not only by buying the junior tranches but also by stimulating competition in the NPLs market. Remaining on the buy side, Atlante will offer a higher price for NPLs, thus potentially increasing competition and leading the other operators to raise their offer prices.

Is this goal achievable? Considering the little endowment (€ 8bn compared to c. € 350bn of the total amount of NPLs) and the presence of big and mostly foreign specialized investors with a strong bargaining power and a lot of available resources, Atlante fund effectiveness is limited. The contribution of the other factors mentioned in the figure are almost considered irrelevant or difficult to be realized. In particular, the expected increase in recovery rates is dependent on an overall recovery of the economy, which effective occurrence is based on optimistic forecasts. At the same time, in my opinion, the predicted impact of the reduction of recovery times is hard to be realized at least in the short period, even though the Government is working in the direction of decreasing the overall time needed to conclude the recovery process, which currently takes up to 6/7 years. This factor represents one of the main reason of the strong devaluation of Italian NPLs and the government is approving some ad-hoc decrees to target and solve this issue[73].

The effectiveness of Atlante's intervention in the NPLs market is related to the amount of fresh capital the fund will be obliged to inject in troubled banks participating to capital increase. In fact, should Atlante help troubled banks, it will devote less resources to the purchase of NPLs. Finally, the magnitude of private investors' investments for the senior tranche of the NPL-backed securities issued by the Bad Bank, will have an impact on the resources the Fund will be able to use in the NPLs market.

7.4. Amendment of law No 130 of the 1999 "Italian Securitization Law"

On June 2017, the Italian Parliament introduced a new article amending the old article 130 about "The Italian securitization Law". This new decree significantly expands the operativity of the SPV, or Special Purpose Vehicles, in order to facilitate securitization transactions and recovery or restructuring operations of non-performing exposures between SPV and financial intermediaries or Italian banks.

The first field of application is the NPLs' securitization. In this context, the SPV will be allowed to grant new loans to debtors aiming at improving their current non-performing status and return "in-bonis". For sure, to make this procedure possible, debtors must meet specific conditions:

- They shall be identified by a bank or a financial intermediary;
- The notes issued to finance the granting of loans shall be subscribed by qualified investors;

[73] See Chapter 4 on ECB Guidance on non-performing loans.

- The bank and/or the financial intermediary that selected the borrowers shall retain a considerable economic interest in the transaction (retention rate of 5%).

Always in the context of securitization, it is now also possible to set up a new SPV (called ReoCo) with the sole purpose of purchasing and managing the value of real estate, registered movable assets and any other assets securing securitized receivables and use the money generated to the exclusive benefits of the noteholders and for the payment of securitization transaction costs.

During the restructuring agreement or recovery procedures, the new law establishes that the SPV can purchase or sign equity or quasi-equity instruments issued by the assignor, with the purpose of returning him “in-bonis”. The amount deriving from this purchase can be considered as the payments made by the debtors and exclusively used for satisfying the rights incorporated in the notes issued and the repayments of the securitization transaction costs.

8. A European Bad Bank

On January 30th 2017, in a seminar organized by the ESM, or European Stability Mechanism[74], Andrea Enria, chairman of the European Banking Authority, evoked the idea of a European Bad Bank, an Asset Management Company to manage bad loans on an international scale. Once again, the proposal came as European banks (especially Italian financial institutions) struggle to find an efficient solution to resolve the non-performing loans issue, which is slowing the European recovery.

Enria outlined how: *"the problem is related to the absence of a real NPL's market in Europe and to the low market prices. An AMC could be set up with government support to buy loans based on their "real economic value" rather than their market price […..] the AMC would then have a timeline of, for example, three years within which to sell the loans at their real value – and take the consequences if it fails to do so"*.

The Bad Bank would be financed mainly by private investors (70-80% of the total amount), while the remaining part would be financed with the support of national institutions, and would have a size of € 200-250bn.

The new company strategy would be:

- **To reduce** the **spread between transfer price and nominal value** by offering a price higher than the current market price but still lower than the Book Value;
- **To support the development of a more efficient secondary market** for impaired assets. In fact, forcing banks to dispose NPLs without the existence of a structured and liquid secondary market for bad loans, lead to an inefficient gap between bid and ask prices, creating financial stability concerns and dangerous capital shortfall or losses in banks' balance sheets.

Before buying bad loans, the originators would be evaluated through a stress test, which would assess the potential capital shortfall for the bank[75]. The Stress test would be functional to estimate the State aid necessary to recapitalize the bank, to cover the capital shortfall

[74] The European Stability Mechanism founded in 2012 after the sovereign debt crisis, represents a support towards those European countries asking for some financial sustain. Spain and Cyprus were the first countries receiving disbursements while currently, the only ESM program still active is the one towards Greece.
[75] Pillar 1, part 2 minimum capital requirement.

after the NPLs' transfer, and to fill the gap between the transfer price and the book value[76]. In addition, banks with higher NPLs ratios would be forced to sell specific assets to the AMC.

The hypothesis of the creation of an ex post claw back has been promoted in order to ensure that, in case the bad bank would not be able to sell bad loans at the real economic value within a specific time frame, a warrant equity issued by national Government would avoid the risk the bank remained paralyzed with a not identifiable capital hole until the assets are sold. In the hypothesis, toxic assets are not sold within the time horizon, the loss taken would be covered by the warrants exercised by the national Government, avoiding any burden sharing across European countries.

Even if far from being realized, the idea of a European Asset Management Company underlines how NPLs are not only an Italian or Greek burden, but a common issue for the European community as a whole. European authorities understood and clearly identified the steps to be implemented by the European banking sector to solve the asset quality problem: after the identification of toxic assets, the next decisive action is represented by cleaning balance sheets.

[76] At the moment of the transfer, the Bank would take a net loss given by the difference between the book value and the transfer price offered by the AMC.

9. UniCredit case study

9.1. Credit Risk

The economic and financial solidity and the profitability of UniCredit Group depends mainly from the credits' quality of its clients. In developing its core business activity, the bank is exposed to the risk that an unexpected change of the credit quality of its clients could generate an erosion of the corresponding credit value, determining a partial or total write-off of the sum. This risk materializes when the counterparts do not fulfil their contractual obligations or when the bank concedes credit based on incomplete or incorrect information, which would determine the concession of the credit at different contractual conditions. For what concerns the borrower, the main default reasons are attributable to the impossibility of reimbursing the debt due to lack of liquidity and insolvency, or to the sudden development of unexpected situations not directly related to the economic and financial stability of the borrower (macroeconomic events).

As we can see by the graph below, a large share of the non-performing exposures stock of UniCredit at September 2016, was originated before of the financial crisis.

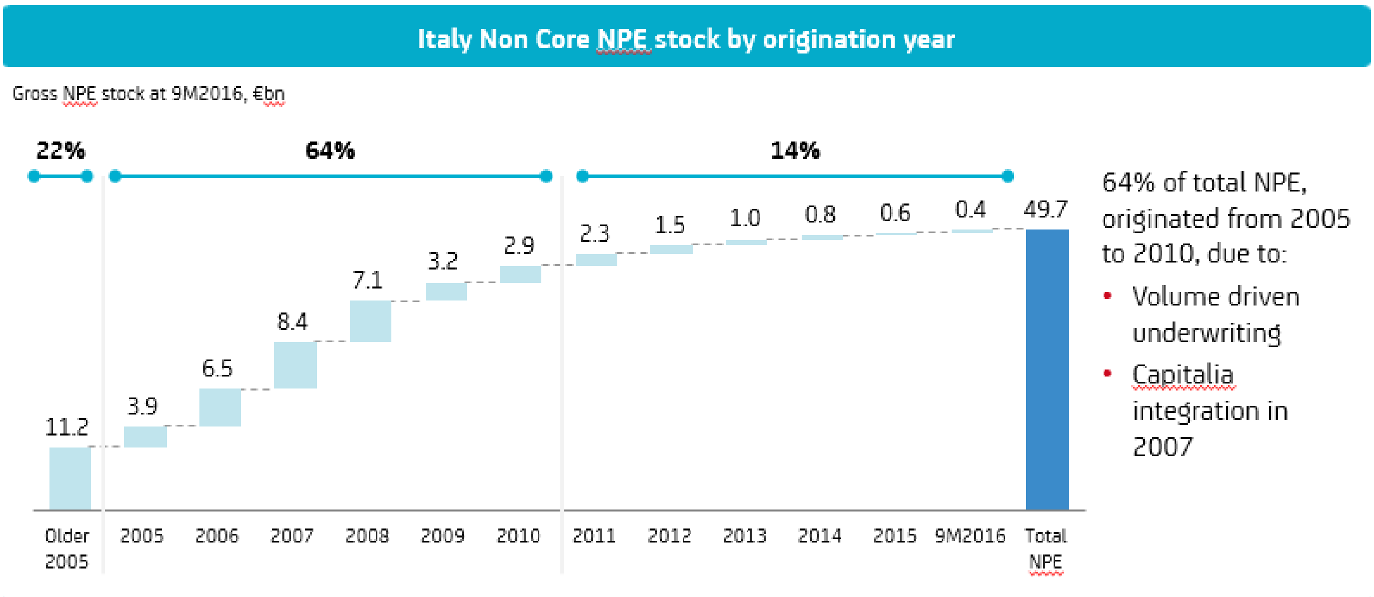


Figure 27: Italy Non-core NPE stock by origination year, UniCredit, (Transform 2019 presentation)

The following tables synthetize the credit exposure of UniCredit Group and non-core division respectively.

	Gross(€bn)	Coverage Ratio (%)
Bad Loans	31.8	65.6
UTP	23.2	43.3
Non-performing exposures	56.3	55.6
Performing exposures	361.6	n.a.
Total Loans	417.9	n.a.

Table 4: Group Gross amount (€bn) and covrage ratio for type pf exposure as of September 2016

	Gross(€bn)	Coverage Ratio (%)
Bad Loans	18.7	65.6
UTP	12.5	44.6
Non-performing exposures	31.5	57.0
Performing exposures	5.9	n.a.
Total Loans	37.4	n.a.

Table 5: Non-core Gross amount (€bn) and coverage ratio for type pf exposure as of September 2016

The Gross NPE Ratio of UniCredit Group as of September 2016 was 15.1%, still significantly above the European average of 5.4%(see chart below)[77].

[77] World Bank data.

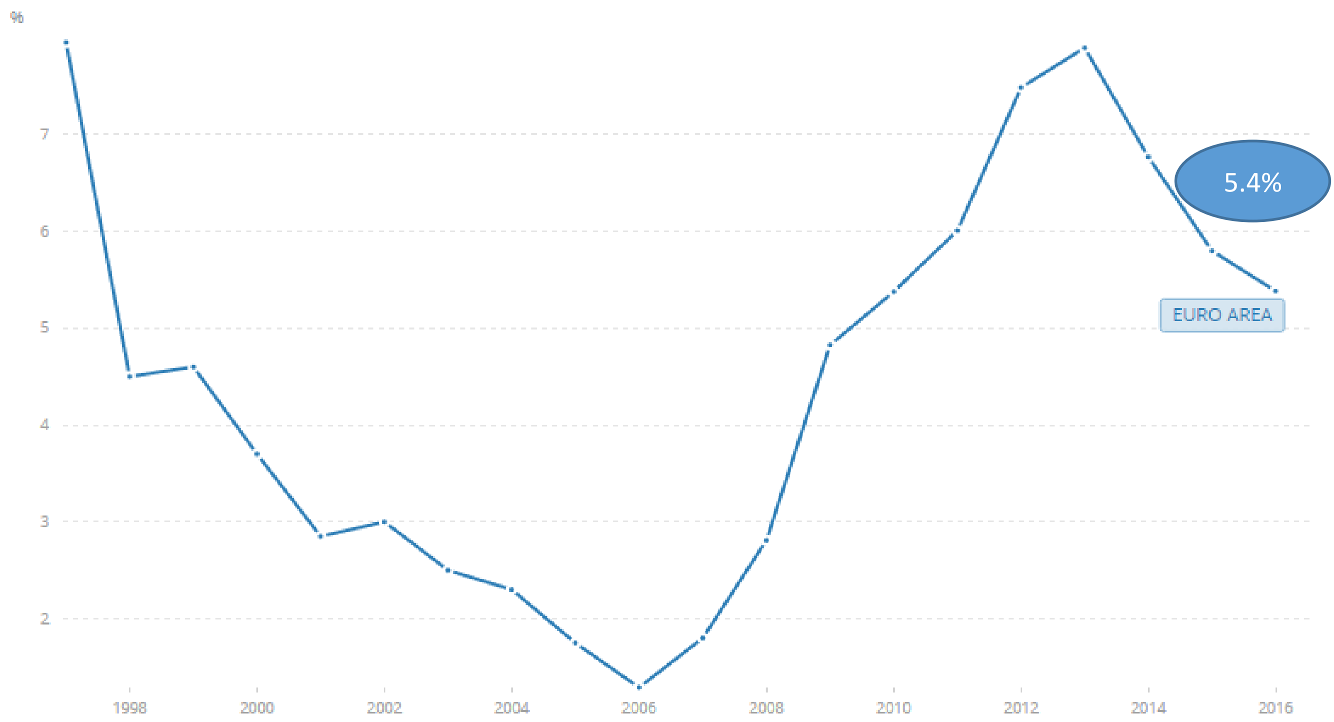


Figure 28: Euro Area gross average NPE ratio as of 2016, (World bank)

If we restrict the comparison to the main European competitors (G-SII Europe), the average Gross NPE Ratio as of September 2016, amounted to 2.8% vs. 14.7% of UniCredit Group. Therefore, although the bank underlined the willingness and the commitment towards the improvement of the Asset Quality, it is likely that at the end of the execution of the Plan, UniCredit will not be able to reach a NPE level comparable to the one of its main competitors.

To activate a proactive strategy for the correct and prudential evaluation of loans, the bank is devaluating even performing portfolios, using statistical tools and historical data to estimate credit risk (the functioning of these tools does not represent object of interest of this paper).

9.2. NPL disposal strategy

The deterioration of the Asset quality and the increasing focus expressed by the International regulators and the financial community about a drastic reduction in the level of non-performing exposures booked in banks' balance sheets, pushed financial institutions to evaluate the opportunity of selling bad loans. This opportunity introduced the issue related to the bad loans' evaluation methods adopted by lenders. Initially, bad loans are evaluated at their fair value, corresponding to the amount paid by the borrower inclusive of transaction costs and revenues directly linked to the disburse of the loan. Then credits are evaluated at their amortization cost compared to the realizable value in case of an objective reduction value fact. The NPLs balance sheet evaluation performed by UniCredit, is managed taking into account the future cash flows obtained through all the different recoveries strategies developed by the bank, the financial capacity of the borrower and the realizable value of secured debts. According to International Accounting Principles, non-performing loans' Book Value is obtained by discounting future cash flows at the same discounted rate initially applied to the borrower.

From 31th December 2014 to September 2016, UniCredit demonstrated its willingness to concretely tackle the NPLs issue, concluding the disposal of about € 12.6bn gross non-performing loans (c. € 9.8bn of book value), and in December 2016, announced the sale of about € 17.7bn of NPLs (FINO Project).

9.3. Non-core division

UniCredit decided to set a non-core division, specialized in the management of non-performing exposures in 2013[78]. The non-core unit was created with a dedicated management team and structure that employed about 1,100 specialized Full-time Equivalents (FTEs) and adopted its specific credit risk processes.

The underlying rationale behind the creation of this separated unit, which was the first example in the Italian banking sector, was:

- To reduce the portfolio risk exposure of the core unit by extrapolating impaired loans from the gross amount of loans;
- To create the basis for the acceleration of the dismissal of the NPLs;
- To focus the management and investors' attention on core business objectives and performances;
- The use of dedicated NPL expertise form staff to management level;
- To provide an efficient and timely reporting activity, allowing for continuous adjustments of the bank's strategy.

Creating a separated unit in the bank to manage non-performing exposures is also the suggestion of the ECB[79]. In fact, while performing its evaluations, the ECB recognized the fragility of UniCredits' credit risk, underlying how the high level of non-performing loans represents a concrete obstacle for its ability to generate profit through its ordinary activities. Therefore, the European Central Bank has also exhorted the Italian lender to adopt a detailed strategic plan for an organic reduction of the gross and net amount of NPEs. Once again, the regulator stresses the attention on non-performing loans, underlying how this issue cannot be faced through ordinary activities or cannot be ignored, but, at the opposite, it should become the target of dedicated units and trained and experienced staff and managers. Consequently, UniCredit understood that, facing the issue of impaired loans represented an effective way to relaunch its core business activity, by releasing monetary resources that, otherwise, would be used mandatorily as provisions for non-performing exposures. Improving asset quality and cleaning balance sheets became the main objective of UniCredit also to attract capital investors and increase deposits' volumes boosting revenues. Therefore, the cleaning of asset quality became one of the way to improve the

[78] Unicredit Group: Guidelines of Strategic plan 2013/2018
[79] Guidance to Banks on non-performing loans, January 2017.

reputation of a solid and strength commercial bank in a moment in which clients' trust on banking sector is very low and regulatory requirements are very strict.

The first step after the creation of the non-core unit was the selection of loans to channel in it. UniCredit chose non-performing loans, performing loans characterized by higher risk and past incidents and loans related to the Real Estate sector, for a total gross amount of about € 87bn[80]. The 2018 goal fixed by the plan, was to reduce the total gross amount of impaired loans reaching the level of about € 33bn. The main drivers of these reductions were identified in possible NPL sales opportunities through the creation of special purpose vehicles or through the direct sale to external investors and the inverse migration of loans from impaired to safer risk profile (change of status and reentry in bonis status). According to the data published in the 4Q 2017 presentation, UniCredit succeed in reaching the target of € 31.5bn mainly thanks to the FINO transaction, disclosed on December 13th, regarding the sale of € 17.7bn of Italian non-performing loans[81].

UniCredit continued to stress the importance of the non-core evolution also in the presentation of the new Strategic Plan “Transform 2019”. The updated target level of net NPE for 2019 is € 8.1bn, to be reached through:

- FINO Transaction with a full disposal of € 17.7bn of bad loans;
- Other disposals of about € 1bn of UTP loans;
- Repayments;
- Cash recoveries on UTP;
- Write-offs.

The same strategy will be adopted for the other divisions of the Group. Commercial banking Italy focused on the risk discipline in order to adopt an effective proactive strategy towards the underwriting of new agreements and loans. In specific, the bank will focus on investment grade customers and on the management of KPIs to ensure a better origination and continue to reduce the default rate on new loans. A new risk discipline monitoring will be activated with the introduction of warning signals, automatic triggering of classification to worst status and faster deleveraging on riskier customers.

[80] As of Strategic plan 2013.
[81] See paragraph 4, chapter 9 on FINO Project.

9.4. FINO Project, the structure of the deal

The most significant action implemented by UniCredit to improve the asset quality is the execution of FINO[82] Project, which consists of a two-phased de-risking of € 17.7 billion of gross bad loans through a securitized portfolio of which UniCredit will sell at least a 20% vertical tranche to third party investors in phase 1 during 2017. The full disposal of FINO (phase 2) will take place during the period of the Strategic Plan (2017-2019). The bank has signed two distinct framework agreements with FIG LLC, affiliate to Fortress Investment Group LLC and LVS III SPE I LP, subsidiary of PIMCO BRAVO Fund III, L.P, respectively. FINO transaction represents today the biggest deleveraging action undertaken by an Italian bank[83], with a volume of toxic assets sold that is higher than the whole volume of loans disposed by all Italian financial institutions from 2006 to 2015.

9.5. The price of the deal

The average sale price of FINO portfolio corresponds to the 13% of the gross book value. The percentage related to the price of the deal is more relevant if we compare this value to the average price of concluded deals in Italy in the period from 2006 to 2015[84] which was equal to 43% of the GBV. The recovery rate during the period 2014-2015 drop to 34.7%[85]. As the reader can argue, the price of FINO portfolio is significantly lower than the Italian average; in the following paragraphs, we will try to shed some light on the reasons behind these decisions adopted by UniCredit managers' team.

To create the portfolio, the first step of the process was the selection of the asset classes to be included in it. As we will see later, the decisions taken during this phase have an important effect over the price of the deal.

[82] FINO stands for Failure Is Not an Option.
[83] At the moment of writing this work, MPS NPLs disposal was not yet officially concluded.
[84] F Ciocchetta, F.M. Conti, R. De Luca, I. Guida, A. Rendina, G. Santini, "I tassi di recupero delle sofferenze", Banca d'Italia, Notes of Financial Stability and monitoring N.7, January 2017.
[85] F Ciocchetta, F.M. Conti, R. De Luca, I. Guida, A. Rendina, G. Santini, "I tassi di recupero delle sofferenze", Banca d'Italia, Notes of Financial Stability and monitoring N.7, January 2017.

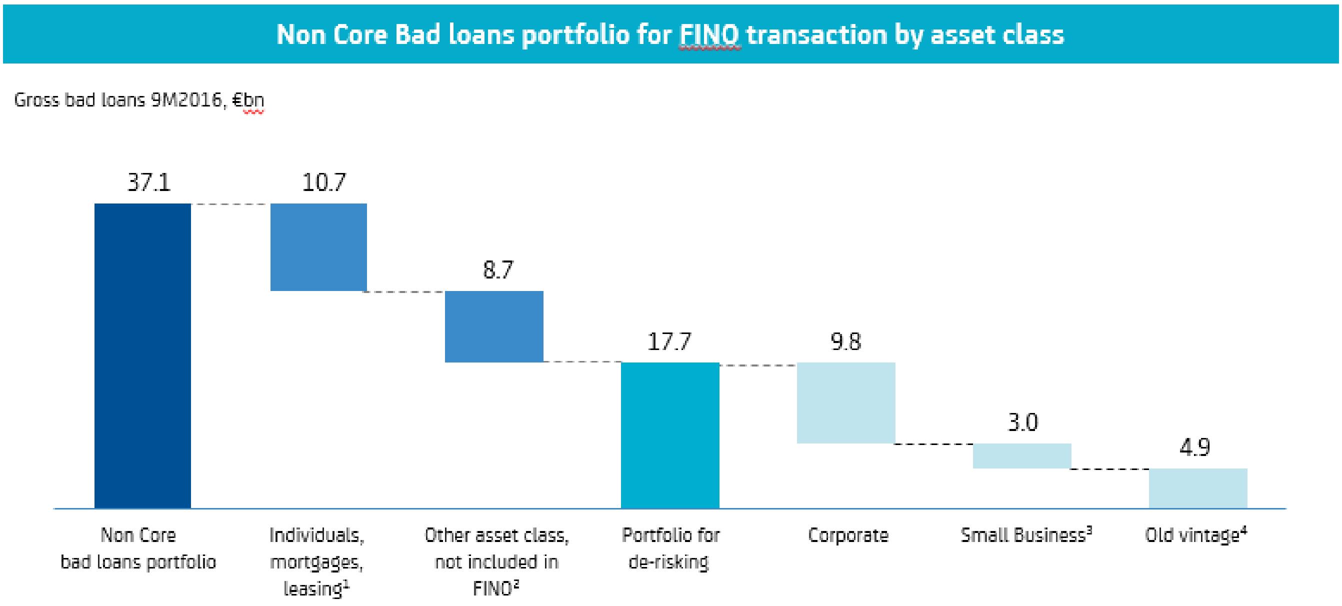


Figure 29: Non-core Bad loans portfolio for FINO transaction by asset class, (Transform 2019 presentation)

The selection of the classes of loans to be included follows the necessity of excluding individual mortgages and leasing from the portfolio. Mortgages are associated with political or social risk related to the expropriation procedure, with the risk of attributing a bad connotation to the whole operation. Leasing were omitted due to the longer time needed to release the assets, with the risk of extending and hindering the closing of the operation. Therefore, the portfolio is mainly composed by unsecured loans related to small, medium and big enterprises:

- € 9.8bn loans related to big enterprises;
- € 3bn loans of small and medium enterprises;
- € 4.9bn loans classified as non-performing before 2009 and denominated *Old Vintage.*

The types and the characteristics of the loans included in the portfolio represents the first factor pushing down the price of the deal. According to a research conducted by Banca d'Italia[86], the recovery rate and hence the price of corporates' loans is lower (33.4%) than families' or retails' loans (38.5%). Moreover, *Old Vintage loans* included in the portfolio have been originated on average 12 years ago versus the average seniority of 4 years of the other loans included in FINO portfolio. According to the same research, the recovery rate of Old

[86] F Ciocchetta, F.M. Conti, R. De Luca, I. Guida, A. Rendina, G. Santini, "I tassi di recupero delle sofferenze", Banca d'Italia, Notes of Financial Stability and monitoring N.7, January 2017.

loans (becoming non-performing before 2005) is on average 7.1% lower than loans becoming non-performing after 2006. In addition, the final price is influenced by the composition of the FINO portfolio, mainly constituted by unsecured loans which are characterized by lower recovery rates compared to secured ones.

Another factor that pushed down the price of FINO portfolio was the characteristics of the deal. Selling portfolios to third external parties guarantee lower profits compared to the earnings achieved through the internal management of the toxic assets. The main reasons for this price gap are determined by:

1. The higher rate of returns required by the external investors due to the risk they incur;
2. The Italian legal system which does not guarantee safe recoveries and certainties about the time needed;
3. A not developed non-performing loans market in Italy which determines a large bid-ask spread which hinder the process.

9.6. The Structure of the deal

As mentioned earlier, FINO project consists of two different phases:

1. In the first phase of the Framework Agreement, the companies involved and UniCredit committed to negotiate and finalize the creation of a Special Purpose Vehicle (SPV)[87], which aim is to purchase the bad loans of the FINO portfolios. The entire amount will be securitized into different tranches and investors will subscribe 50.1% of each note while, the remaining part (49.9%) will be subscribed by UniCredit.
2. in phase two that is occurring in the second half of the current year, there will be a gradual sale of the notes subscribed by the bank to third parties to arrive at holding a value lower than 20% of the whole notes, and an optimization of the financial structure of the notes though Government guarantee (GACS). All the different stages of the second phase of the project have not yet been finalized, although, they will be subject of further negotiation between parties.

The first phase of the process has been successfully completed on 17th July 2017, in line with the intention expressed on the plan. The SPV will be independent from UniCredit and

[87] See paragraph 1, chapter 6 on Securitization.

the investors, which cannot own part of the capital of this vehicle. The purchase of the entire amount of bad loans by the SPV will be financed through the issuance and the consequent subscription of the Asset-backed Securities (Notes) by UniCredit, PIMCO and Fortress. In each securitization process, the SPV will issue three different classes of notes; each of these notes differ according to the time of reimburse, configuring a cascade process; Notes "B" are subordinated to Notes "A" and Notes "C" are subordinated to Notes "B". UniCredit and the investors committed to subscribe 100% of the nominal value of each classes of Notes[88]. The scheme below summarizes the deal structure:

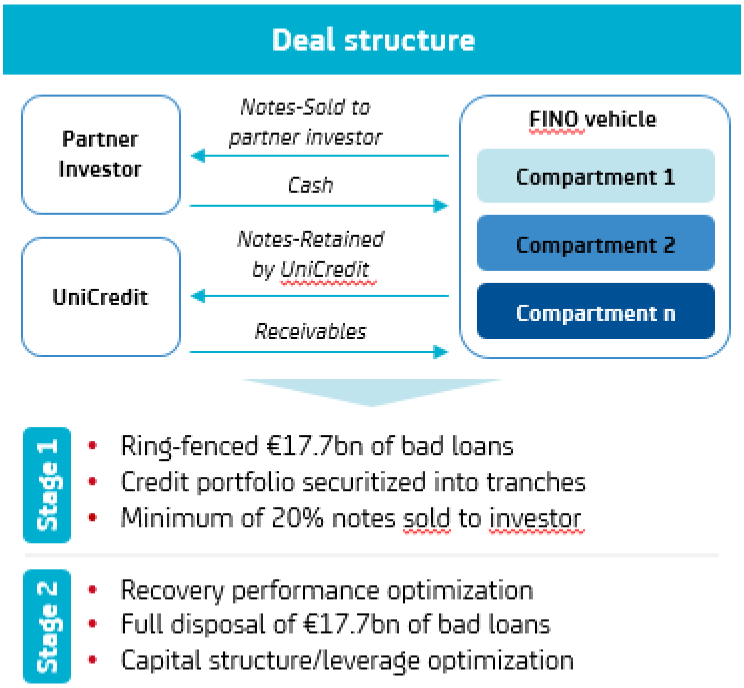


Figure 30: FINO deal structure, (Transform 2019 presentation)

At the end of the securitization process, the c. € 17.7bn of bad loans will be transferred to the SPV. This process will allow UniCredit to derecognize the total amount of bad loans sold through this transaction. In compliance with what prescribed by IAS39, according to which: "*A financial liability should be removed from the balance sheet when, and only when, it is extinguished, that is, when the obligation specified in the contract is either discharged or cancelled or expires. Where there has been an exchange between an existing borrower and lender of debt instruments with substantially different terms, or there has been a substantial*

[88] 49.9% subscribed by UniCredit and 50.1% by PIMCO and Fortress.

modification of the terms of an existing financial liability, this transaction is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability". Therefore, credits can be derecognized once the issuer of debts demonstrates to have transferred to independent third parties all risks and benefits associated to that financial liabilities.

The consequences related to this accounting process represent one of the main advantages deriving from FINO project. Indeed, thanks to this transaction, UniCredit accelerate immediately the non-core run-down, reducing significantly the gross amount of non-performing exposures of the non-core portfolio. At the same time, UniCredit provides a mark to the other Italian peers, identifying as the most active actor in the national NPLs' market and demonstrating to investors the concreteness of its strategic plan. From another point of view, this incisive action is the result of a previous credits' bad management strategy, which could provide bad signals to the market. This is why, the bank was obliged to implement a proper communication strategy to avoid distortions' perceptions.

9.7. The Financial communication of FINO project

Since the assignment of Jean Pierre Mustier as Chief Executive Officer of UniCredit Group in July 2016, the bank stressed the attention towards the non-performing loans issue. The French banker understood how the dramatic change UniCredit needed, should pass through the significant decrease in the amount of non-performing exposures weighting on UniCredit's balance sheet[89]. In synergy with the costs' cut, the closure of hundreds of branches and the personnel reshaping[90], the bank focused on the asset quality improvement. The objective was ambitious; with a Euro 17.7bn NPEs disposal, UniCredit became protagonist of the biggest disposal of toxic assets in Italy. The acronym chosen for the project, FINO stands for Failure Is Not an Option, suggests the importance and the ambition of the program and has been chosen with the intention of transmitting to investors and to the employees the idea of self-confidence and audacity necessaries to achieve the desired goal. I had the opportunity to work for UniCredit investor relations office during the period before the presentation of the project and during its implementation the following months. Analysts and institutional investors' attention was focused on the progresses of the project and many of them were skeptical about the effective success of the program. They criticized the economic feasibility of FINO project claiming how UniCredit would incur in a significant economic loss to dispose that amount of non-performing exposures. Investor relators' officers aim was to convince existing and potential investors about the necessity of the plan. The pressure raising from the national and international regulator reduced the time available for starting this cleaning process. The advantages deriving from this project, underlined also during the roadshow conducted all over the world to attract capital for successfully completing the capital hike, were the following:

- Balance sheet de-risking;
- Material reduction on the amount of non-performing exposures;
- Increase of coverage ratio.

All these objectives were conducted in compliance with the regulator guidance and laws. Moreover, UniCredit was creating a gap with the other Italian banks moving closer to the restricted pool of the most efficient and secure banks in Europe. UniCredit was outperforming the other Italian peers, was the first one to tackle in a decisive way the NPL

[89]According to the 2Q16 financial results presentation, Total Group Gross bad loans was Euro 51.3bn in 1H16.
[90] A reduction of about 14.000 FTEs within 2019; a target reduction of 944 branches within 2019.

issue, and in this way, it was increasing the confidence of investors and clients in a moment in which the trust towards the Italian banking system as a whole was dramatically compromised. In a certain way, in my view, UniCredit top managers were able to exploit a moment in which all the spotlights were headed towards the necessity of Italian banks to reduce the huge amount of toxic assets in banks' balance sheets. In this way, they obtained the attention and the trust of customers and national and international investors.

From a financial point of view, UniCredit management team decided to do not disclose the value of the deal till the official conclusion of the agreement. Indeed, it was one of the most critical point of the plan. Investors' and analysts interest was to quantify from a monetary point of view the losses that the bank would inevitably incur as a result of the structure of the deal. UniCredit decided to disclose in a very detailed way the characteristics of the contract and the name of the interested parties but avoided deliberately to disclose the economic terms of the deal, in order to keep the attention towards the other benefits deriving from the FINO project. The message the bank was passing was that FINO project had to be done, the time was now and the overall benefits of this program overpassed significantly the economic interests.

10. Interview with Mr. Piero Munari, Head of UniCredit Investor Relations Office

The following interview was conducted thanks to the helpfulness of Mr. Piero Munari, head of Investor Relations office at UniCredit. The interview is divided into two parts; the first one provides Munari's overview about the Italian NPL market while, the second part, analyses UniCredit's risk management strategies based on the guidelines set by the industrial plan Transform 2019, and FINO project.

1) **Why banks sell non-performing loans?**
   Banks aim at reducing the credit risk and the cost of equity. Once financial institutions reach the first goal, investors require a lower return; in fact, the lower the risk, the lower the return investors ask.

2) **Does the ECB push banks to reduce the amount of non-performing loans in their balance sheets?**
   No, ECB never forced banks to dispose non-performing loans; it never set target to be achieved; it is recommending and encouraging banks to reduce their overall exposure towards non-performing loans. The underlying reason is that with such a huge amount of NPEs, the banking sector is not able to sustain the real economy and to grant credits to corporate or retail clients. Furthermore, the high level of toxic assets obliges banks to spend management time in the administration of the non-core business. At the same time, even if funds and specialized investors of NPLs are attracted by high returns, they face difficulties in matching the expectations of sellers, whose ideal transfer price results being pretty higher than the one offered by the buyers.

3) **So, are you arguing that now Italian banks need to reduce their non-performing exposure?**
   Yes, and this is important especially for an economy which suffered of a double deep and which was severely hit by the economic crisis. It is necessary that banks become again the fuel of the economy by granting credits, and the amount of toxic assets represents the biggest obstacle to reach this goal.

4) **Which are your personal expectations about the evolution of the Italian NPLs' market in 2017? Do you have positive perceptions?**

   The overall amount of non-performing loans is decreasing as foreign funds are focusing their attention on the Italian non-performing loans' market, which represents today the most attractive distressed debt market in Europe. Consequently, the number of deals is going to increase sharply, thanks also to the contribution of the already existing investors, whose purpose is to spread their fixed costs on a larger number of operations the entrance of new specialized operators like PRA group or Hoist Finance and the presence of big international investors.

5) **Is the Italian Government moving in the right direction through the implementation of new regulations like GACS or by reducing the time frame of the non-performing loans disposal?**

   Absolutely yes. In 2016, the Government introduced also some fiscal incentives for both sellers and buyers, improved the judiciary settlement and facilitate the possibility to manage not only newly generated non-performing loans but also the stock of existing ones.

6) **Which other changes should the Government favor in order to improve the NPL market?**

   I think that the most important target to achieve is to fasten the overall disposal process. A possible solution could be implementing ad hoc courts specialized in the deals involving non-performing loans.

7) **Which are the loans' categories preferred by specialized operators looking for a profitable investment in the NPLs' market?**

   They prefer buying unsecured loans due to the absence of collaterals. In fact, the presence of collaterals slows down the whole recovery process and creates obstacles that hinder the transaction[91]. In addition, buyers prefer retail loans instead of corporate loans in order to make it easier the negotiation process. Today, the crucial variable is the presence of collaterals.

[91] See paragraph 7, chapter 5 on setting the price of a secured loan.

8) **We pass now to analyze UniCredit case; apart from FINO project, which obviously represents the core of all the activities the bank want to implement to reduce its exposure towards toxic assets, I would ask you which are the main drivers for the non-core run down according to the new Strategic plan?**

UniCredit is basically implementing 3 main actions to reduce its credit risk:

- The first one is the **disposal strategy** which consists in continuing to pursue the disposal of non-performing loans to merely reduce the overall amount of bad Loans;
- The second action is called "**Back to bonis**" and is related to the outflow of impaired loans to non-performing loans. To better explain, non-performing loans that pass through a 14 month-period without worsening their status can be transferred to the core and reclassified as performing;
- The third one is the **write-off** of bad loans which consists basically in the annulment of NPLs that lose their value;
- Finally, the **natural run-off**; some exposures naturally expires and therefore are extinguished.

9) **In 2013, UniCredit established the Non-core division which is still functioning today; which are the reason behind this strategic action?**

The bank decided to contain and isolate portfolios composed by loans both performing and non-performing belonging, for example, to the Shipping, Construction or Real Estate sector with the purpose of reducing the future exposure and bring it to zero. The final target was reducing clients' exposure considered as non-strategic and to be managed with a risk mitigation approach.

10) **Another reason was to separate toxic assets in order to manage it separately…**

Incorrect, loans channeled in the non-core division were strategic loans, not only non-performing loans and this is the key aspect. In 2013 the non-core unit was made of about 70% of non-performing loans and the remaining considerable part, about 30%, of performing loans. These exposures were considered non-strategic because of their length, like loans related to the shipping sector, or because they were linked to sector heavily hit by the recession like Construction exposures.

11) Is the non-core division reaching the goals it was created for?

Yes, it is. Non-core division is monitored through the use of KPIs and is working in line with what was stated in the plan. In 2019, thanks to the strategies we mentioned earlier, net non-core exposure will reach € 8.1bn, down from € 29.5bn as of third quarter 2016.

12) If we now move to FINO transaction, why does UniCredit decide to sell through an SPV (Special purpose Vehicle)?

The purpose was the portfolio securitization, the creation of vertical tranches to be sold in the market and the unique strategy that fit this goal was selling through the creation of two Special Purpose Vehicles, one with Fortress and one with Pimco. Otherwise UniCredit should sell the same non-performing loans separately but in this case the bank would not match risk and profit expectations of buyers.

13) Which is the rationale behind the loans' asset classes contained in FINO portfolios? Why UniCredit decided to exclude from the transaction specific asset classes like mortgages and leasing?

First of all, UniCredit excluded from FINO transactions mortgages in order to avoid political or social risks related to the expropriation procedure, which could attribute a bad connotation to the whole operation. Secondly, the bank decided to omit leasing due to the longer time needed to release the assets, with the risk of extending and hindering the closing of the operation.

14) The new Industrial Plan, "Transform 2019", alludes to Joint Ventures for the disposal of non-performing exposures; could you better explain which are the main characteristics of these operations?

In some situations, to manage non-performing exposures, UniCredit prefers working with operators through joint ventures. I provide you an example to better explain the rationale of these deals: in case UniCredit finances a construction and before the conclusion of the construction the debtor shows some financial difficulties and finally goes bankrupt, the bank can decide to do a Joint venture with another building company with the purpose of completing the construction. In this way, the bank succeeds in accelerating the rescue of the loans by selling the construction once it is finished.

15) **Therefore, if I understood it properly, Joint Ventures are not concluded with specialized operators with the purpose of disposing non-performing exposures, at the opposite the goal is to restore the underlying assets preserving the ownership of the exposure..**

Correct, for example, in June 2015, UniCredit, Intesa San Paolo and KKR signed a deal according to which they would transfer to the KKR AM platform selected portfolio of exposures related to restructuring companies. The aim of the platform was to provide new capital and operational competences to distressed medium-big companies supporting in this way banks with the management of their assets. The final output was recreating the conditions for the financial stability of those companies, so that they could grow again contributing to the final benefit of the banks.

16) **Which are the KPIs used by UniCredit for the monitoring of non-core performances?**

The indicators used by the bank to monitor non-core division are:

- The reduction of gross Non-performing exposure;
- The coverage ratio;
- The time of recovery;
- The efficient management of collaterals. From this point of view, the purpose of the bank is to assure the preservation of collaterals' value. Therefore, the bank need to manage properly collaterals.

17) **What about recovery rate?**

There are two different ways of measuring recovery rate; the first one is related to the single loan and provide information about the amount recovered related to the single exposure. Today the Italian recovery rate average on a single exposure is around 40%. This value is computed on the total loans' life-cycle and not on a yearly basis. The other recovery rate used by UniCredit is measured on the total gross Non-performing exposures on a yearly basis. Clearly this value is lower than the recovery rate measured on a single exposure.

18) **UniCredit set € 8.1bn one-off loan loss provisions of which € 7.2bn targeting non-core division. Is this extraordinary operation the result of a request formally expressed by PIMCO and Fortress?**

Generally speaking, the higher the coverage ratio, the lower the final transfer price and the lower the risk linked to that exposure. Therefore, increasing the level of LLPs on the portfolio to be sold allows to match buyers' requests. For what concern the UniCredit case, we performed a bottom-up valuation taking into consideration the migration rate flow of Unlikely To Pay exposures, or UTP, to bad loans and we increase the coverage ratio matching the buyers' requests.

19) **To conclude the interview, I would ask you which is the future risk management strategy UniCredit is going to implement in order to reach the goals set in the plan?**

According to UniCredit plan, the focus of the risk management strategy will be on reducing the expected loss both on new origination loans and on the existing non-performing exposure stock. Regarding new origination loans, the plan is to better select new loans to grant, while, for what concerns the existing stock, UniCredit is going to implement the four actions we mentioned earlier. In addition, we will put into action all the operations to reduce the risk exposure like increasing the number of secured loans or using external guarantees promoted by institutional operators like SACE.

11. Interview to Mr. Fabio D'Orefice, Direttore Area Nord Banca Sviluppo

To better sustain my deductions, I had the opportunity to talk with Mr. Fabio D'Oreficie, Direttore area Nord of Banca Sviluppo and previously General Director of BCC Gestione Crediti. Thanks to his twenty-years' experience in the credit recovery industry he displayed me his own view about the NPLs issue, the Italian distressed debt market, and the best solutions for the different non-performing loans classes. This final interview will allow the reader to increase his awareness on the topic and create his final opinions on the object of discussion, and help me in introducing the concepts explained in the conclusion of the thesis.

1. **Firstly, I would like to clarify with your help the reasons behind the existence of different categories of loans in respect to collaterals**
   10 years ago, there were only secured and unsecured loans; after the explosion of financial crisis in 2007, collaterals have been divided in many other subcategories like Real Estate, corporate, retail, CRE or Commercial Real Estate, according to their origin and their consequent ease of recovery. Therefore, in such a way we can assume that the categories of collaterals have arisen from the necessity of all the operators in the distressed debt market of categorizing exposures based on their appeal, their presumable recovery rates and their sales methods.

2. **You have a very long and strong experience in Banca di Credito Cooperativo. What is the bank's relationship towards the NPLs issues?**
   Banche di Credito Cooperativo are very limited in term of financial activity. Their main task is granting credit and favor the entities operating in the territories in which they work. Therefore, they should focus strongly in developing solid relationships with clients. This connection determines a double opposite effect over the NPLs issue; in fact, if on one hand this relationship, based on mutual trust and knowing, should favor the recovery activity of banks, which knows their clients and their financial position very well, on the other hand, the territorial bonds and the particular relationship founded between the lender and the local clients forces the bank to behave in the interest of their clients by avoiding to declare them insolvent or delaying the judicial or extrajudicial procedures. As a result, this relationship, which is the basis of the

strength of BCC and that allows these institutions to work also on small exposures normally ignored by the other bigger banks, could finally hinder the recovery process.

3. **If we would try to determine a sort of guide for banks identifying the possible strategies they could implement to face the NPL issue, what would you suggest for the management and the disposal of secured loans?**
   Assuming that the largest part of collaterals of secured loans in the Italian market belong to the Real Estate “category”, we have to introduce some assumptions related to the typology and the features of collaterals before providing some suggestions. In fact, a house in the city center of Padova, for example, has completely different characteristics than a barn in the suburbs. Obviously, the fact that the first one is easier to be sold have a direct impact on both the time needed for the disposal and the final amount of money recovered in this way. Therefore, as you can understand, the first step is making a distinction of collaterals.

4. **Why does it require so much time for disposing the real estate collateral of a secured loan?**
   The time needed is mainly related to the judicial procedures. Usually, these kinds of exposures are relevant in term of money value if they are put together, requiring therefore a proper legal action to be performed. Moreover, the presence of lawyers creates relevant issues slowing down and hindering the procedure of disposing the collateral.

5. **In your opinion, which is the most viable solution for managing unsecured exposures?**
   Usually unsecured loans are small in term of money value. These exposures can therefore be recovered by specialized workers through an extrajudicial procedure. These staff should have not only a very strong “commercial” and relational attitude, but also a good knowledge of legal and regulatory background joined with a professional comprehension of the corporate dynamics.

6. **Do you think now banks have the potentiality for having this specialized staff?**
   I think that now banks do not have the qualified staff needed for performing this complicated activity, but they have the chance to create specialized workers by requalifying existing personnel and dismissing that kind of activities that do not require any more so many efforts and resourced to be employed. I will give you a suggestion talking about the current situation of Banca di Credito Cooperativo as well as many other Italian financial institutions; why lenders do not requalify workers made redundant? Why do not “create” specialized staff using existing resources? maybe it is difficult but I think it should be a viable solution. In other words, the NPL issue is creating the need of another working activities and therefore, a new figure is rising. The identikit of this specialized employee is the one of a worker with a good knowledge of the banking dynamics and the proper competences for being competitive in the credit recovery world. In other words, it means merging the skills of banks’ employees with credit recovery managers. This is not so easy in practice because it needs a deep cultural change; for example, to be effective, employees responsible for credit recoveries should be paid with provisions and they would be curious and “hungry”; these characteristics do not necessarily match the identikit of a banker.

7. **It is not maybe better and more feasible outsourcing all these activities to the external servicers operating in the Italian market with the aim of simplifying all the procedure related to the NPL disposal?**
   When I was working at BCC Recupero Crediti we interacted with several external advisors and specialized servicers. I had the opportunity to deal with many of these operators and I can tell you that we were not satisfied at all of their service and therefore we gave them to manage only small and not relevant exposures. This situation could help you in understanding how the best solution would be creating your own internal net of specialized workers with the characteristics I mentioned you earlier. Nevertheless, today national regulation does not allow banks in creating this kind of working relationship restricting therefore the possibility for a financial institution of creating an efficient internal structure for the NPL management.

8. **If we continue to analyze the different classes of secured loans, we bump into evidences that recovery rates associated to retail exposures are higher than corporate ones.**

   Well the reason is easy and immediate: negotiating or entering in a relationship with a person is easier than interact with companies. The consequence is that all the procedure related to the recovery activity is more efficient and “slim” with retail exposures, while, when the counterpart is a company, regulation establishes a more complicated procedure which comprehends also the presence of lawyers.

9. **Old loans are characterized by lower recovery rates if compared to “younger” exposures; what would you suggest for these loans?**

   The presence of specialized operators in the market who manage these old exposures and the very low recovery rates associated to these loans should encourage banks in disposing them without considering the hypothesis of managing them internally or writing them off.

10. **Considering the strategies adopted so far, is the Italian baking system moving in the right direction for solving the NPLs issue? Are there some unexplored paths to follow?**

    The Italian banking system is moving in the direction the regulator is allowing it to move. The paths banks are now exploring and the strategies Italian lenders are implementing have already been covered in the past by other institutions. Therefore, today the NPLs market in Italy is based on a series of consolidated best practices and habits and there is still a lot of room for improving the overall market. Rationally what was working 10 years ago or more, has not automatically the same effectiveness today, after the changes caused by the financial crisis and the natural development of the distressed debt market.

11. **Are the ECB and Banca d’Italia interested in codifying a code of conduct for Banks in managing their NPLs?**

    National and International regulators are spending a lot of efforts to face and then find a solution for helping banks in solving the NPLs issue. To support the fact, in 2015, Banca d’Italia started to track the activities implemented by banks with the aim of creating a database containing information to understand which are the solutions adopted by financial institutions according to the different NPLs classes. Thanks to this effort, from the end of 2017 to the beginning of 2018, Banca d'Italia will have a track record by which evaluating the efficiency and the effectiveness of banks' activities and therefore direct or maybe also oblige them to change their strategy or improving the existing one.

12. **Recently, Ignazio Visco warned Italian banks about the risk of selling NPLs to a low price with the immediate consequence of generating significant losses; what do you think about this issue? Would you prefer selling NPLs at any cost or do you think the internal management could be a viable solution?**

 In my opinion is better managing NPLs inside. The main reason is the higher recovery rate associated to these solutions. To be exact, selling bad loans to external investors should represent the last option after the attempt of recovering the exposures internally. I think that the years after the financial crisis led banks to incline towards the strategy that required them less efforts and investments; that is why banks decided to choose selling NPLs outside even if it would imply record a loss in financial statements or earning less returns. Therefore, there are no general solutions valid for different exposures; banks should firstly create homogeneous classes and then evaluate individually the best solutions adoptable (forbearances, judicial or extrajudicial procedures, recovery process, sale). Certainly, banks should create a competent and expert team able to make these evaluations. The best scenario is the use of an internal software able to compute exactly the costs the bank is going to incur in managing that loan and compare them with the recovery's estimates; if costs outweighed probable earnings, it is better selling the exposure to external investors. In this way, firstly, the lender is able to create a clear and coherent structure synthetizing the solutions adoptable according to the different circumstances, and secondly, setting target sale prices or minimum acceptable recovery rates. To conclude, in my opinion the first choice should be trying the internal management way.

13. **You did not mention the possibility of writing-off the exposure from balance sheet…**

    I think that the process should always end with a sale to the external market or a recovery process after the internal management. Writing-off the exposure is not convenient because the bank has always the possibility to earn some money at the end of the process, even if the exposure is old, small or worthless. Make these kind of evaluations is not an easy task especially when they have to match with banks managers' expectations or regulators needs. However, this effort must be done.

14. **Do you think the regulator is doing well in dealing with this complicated issue?**

    The regulator is not only asking for disposing NPLs. Its effort is broader and comprehends also the phases prior the conclusion of the deal. In my opinion, this represents the present and future challenge for banks. Therefore, the ability of lenders will not only be measured in intervening in the final phase with the management of non-performing loans, but in the ability of avoiding in-bonis exposures becoming non-performing. Monitoring and timeliness will become crucial factors for good credit managers. Today banks do not have the inhouse workforce to perform proactive strategies. They will be obliged to invest in training their staff or hire new professional workers.

12. Conclusions

Given the extent of the topic, the complexity of the subject and the pace of change of the overall regulatory framework, it is extremely difficult to sum up the NPL issue and to outline a possible solution taking into account all the different perspectives and the impacts of the several factors analyzed in this work.

When I started to write down the first part of this paper, and I began to approach this topic reading papers, presentations, articles and conferences, I was convinced there would be a vast amount of data and information about solutions to the NPL issue in Italy, but I quickly realized there were still significant shadow. Bad loans are not a new challenge for the Italian banking system, they are the result of an old legacy shaped before the explosion of the 2007/8 financial crisis, but the solution to this issue is still far to be reached.

The same troubles and confusion affecting Italian banks are in the same way weighing on the national and International regulators. All the actors in the financial system are trying to move in the proper direction, and the absence of a clear path to be followed was exactly what convinced me in addressing the Italian NPLs' issue as the theme of this work.

This paper did not have the ambition of finding the solution for the distressed debt market in Italy neither wanted to provide recommendations to Italian banks. Nevertheless, thanks to the analyzes made, the practical examples studied and the knowledge of the legislative framework acquired, I can now try to draft a sort of guide for banks, summarizing the possible solutions adoptable according to the different types of exposure, the existence and the characteristics of collaterals or the seniority of bad loans.

Therefore, the starting point of my personal analysis is represented by the definition of the three classes of non-performing exposures:

1. **Secured loans** represent those exposures backed by the existence of a collateral with the aim of reducing the risk associated with that exposure. They represent the largest part of bad loans in Italy;
2. **Unsecured loans**[92] are supported only by the debtors' creditworthiness;
3. **Old loans** are exposures with a seniority of about 10 years or more.

[92] Unsecured loans are referred to banking loans not secured to both retail and corporate debtors.

While the first group is considered safer due to the presence of collaterals and associated with higher recovery rates and therefore with higher transfer prices[93] in percentage of the Gross Book Value, the loans belonging to the second category have both lower recovery rates and sale's prices[94]. But all that glitters is not gold and secured loans, despite the existence of collaterals, are generally linked to longer and more complex procedures of recovery due to the absence of quality information about the assets used as guarantee or the bad collaterals' valuation performed by lenders in the past. This is why the appetite for unsecured loans is still high as witnessed by FINO project, which is mainly composed by unsecured loans.

If we examine the past deals and the trend of the first part of current year, I expect to see volumes of both secured and unsecured loans to soar during 2017 for two main reasons:

1. **Prices' drop:** from 43% of face value for secured loans as of FY 16, to 33% in first quarter current year; from 5% of face value of unsecured exposures as of December 16, to 3% today[95]**;**
2. **High supply:** according to Banca d'Italia[96], the percentage of loans backed by real collaterals over the total amount of non-performing loans is equal to 67%.

Anyway, if we take a look at the average price of the deals as a percentage of the face value in relation to these two categories, we can easily notice the significant gap that is the result of the different valuation made by counterparts. A distressed exposure with a nominal value equal to €100 million, yields if sold, on average, €33/35 million if it is secured, but only € 3/5 million if it is unsecured. This difference marks the price of risk.

To conclude, I can define two different strategies for secured and unsecured exposures; given the assumptions analyzed earlier, banks should prefer selling secured loans in the secondary markets while, for unsecured loans the best solution is probably represented by the internal management, which could allow credit institution to increase recovery rates and consequently their returns.

[93] According to Banca IFIS, Market Watch NPL – The Italian Scenario, NPL meeting September 2017, price of secured loans varies within a range from 32% to 44% of face value, according to collateral type. Taking into consideration price as a percentage of face value we have: CRE (Commercial Real Estate) with a price of 35% and Residential with a price of 44%.

[94] According to Banca IFIS, Market Watch NPL – The Italian Scenario, July 2017, price of unsecured loans varies from 3% to 5% of sales value.

[95] Banca IFIS, Market Watch NPL – The Italian Scenario, July 2017.

[96] Banca d'Italia Eurosistema, Note di stabilità finanziaria e vigilanza N.3, Quanto valgono I crediti deteriorati?, April 2016.

This evidence is confirmed also by the improvements made by the regulator in guaranteeing a consistent reduction of the overall time needed to conclude a NPL transaction[97], by the enhancement of the information available to counterparts to perform better collaterals' valuation and by the simplification of the bureaucracy and administrative burdens needed to conclude a bad loans' transaction. All these changes are moving in the direction of eliminating the drawbacks to efficient and effective secured loans' sales reinforcing my conclusion.

On the other side, the absence of collaterals reduces time needed for the collection of information and data, tending for the internal management of unsecured loans.

Therefore, if we look at the price of the NPLs' portfolio, I would suggest selling to external investors mainly secured loans, while the best solution for unsecured exposures would be opting for the internal management avoiding to sell to the market portfolios which price would not guarantee to the originator acceptable rates of returns.

When we look at the non-performing exposures' we cannot ignore the seniority of positions included in the portfolio. As just outlined in this work, non-performing loans' seniority have a direct impact on transactions' prices; implicitly, older exposures are associated with lower rate of recovery and consequently with lower transfer prices. It is exactly the case of UniCredit FINO project. When, in December 2016, the Italian lender disclosed the economic terms of the deal, analysts and journalists immediately underlined how the NPLs portfolio's price in percentage of the Gross Book Value was significantly lower than the average recovery rates of the other Italian banks[98] involved in past NPLs transactions. Actually, if we look at the composition of the FINO portfolio and to the characteristics of the operation, we can deduce the reasons for this significant price gap.

First of all, with the conclusion of the deal, UniCredit maintained a share of the future probable capital gains generated from the recovery activity made by the other two counterparts[99]. Moreover, selling portfolios to external investors reduces significantly the recovery rate rather than managing the same exposures internally. These characteristics of the deal confirms the uniqueness of the FINO project, which price, therefore, cannot be

[97] See paragraph 6, chapter 5 on the challenges for investors of distressed debt market.
[98] According to Banca d'italia, on average, Italian banks recovery rates on NPLs portfolios deals during the period from 2006 to 2015 are equal to 34.7% of the GBV and equal to 34.7% of the GBV in the two-year period from 2014 to 2015.
[99] PIMCO and Fortress.

considered representative of the whole NPL Italian market, or used automatically as a reference point for other bad loans transactions with different characteristics.

Furthermore, the presence of “old vintage” loans[100] in FINO portfolio, justifies partially the price gap; the older the loans, the lower the recovery rates and therefore the lower the appeal of the portfolio and the final negotiated price. However, old loans represent potential issues for banks and managing internally these exposures could be difficult in term of collecting data and information, and harmful for the concrete risk banks keep on their balance sheets loans that year over year could become more difficult to be evaluated with the view of selling them to external investors.

To conclude, old loans should be sold to the market regardless the potential economic loss generated from their disposal at a very low price compared to their Gross Book Value.

If we go into detail on the specific features of the positions included in FINO portfolio, we can deduce other important conclusions:

- FINO portfolio is mainly unsecured and therefore characterized by lower recovery rates;
- FINO portfolio is mainly composed by exposures towards corporates which recovery rate is lower than retail exposures[101].

The origin of the exposure has an important effect on the recovery rates and the final transaction price. Market trends are showing preference towards consumer exposures, which prices are increasing due to the high demand justified by the facility of recovery compared with corporate exposures. Dealing with families or retail person is easier than relating with companies. These implications make me reinforce the necessity banks clustering in a proper way their bad loans, in order to obtain as much as possible by the NPEs disposal. If financial institutions are able to divide the exposures according to their origin, they are also able to define the best strategy for maximizing their returns, selecting the proper disposal plan. According to my analysis, the best solution should be selling to the market mainly consumer exposures[102] in order to obtain a higher valuation by external counterparts and try to manage internally the other exposures.

[100] Seniority of about 12 years.
[101] According to Banca IFIS, Market Watch NPL – The Italian Scenario, July 2017, recovery rates for corporates and families is respectively 33.4% and 38.5%.
[102] Consumer loans are referred to credit cards, line of credit and personal loans.

Another possibility is also represented by the creation of mixed portfolios, composed by both corporate and retail exposures. This solution is earning growing approval by investors and by banks; in the first quarter 2017, the most important class is the one of mixed debtors (retail and corporate)[103]. This solution allows banks to mix their exposures facilitating the disposal procedure and increasing the sale price in percentage of face value of those exposures like the unsecured or the corporate ones characterized by lower recovery rates. The creation of bigger mixed portfolios meets the needs of the counterparts and allows financial institutions to exploit economies of scale by creating clusters that match dimensional or economic requests.

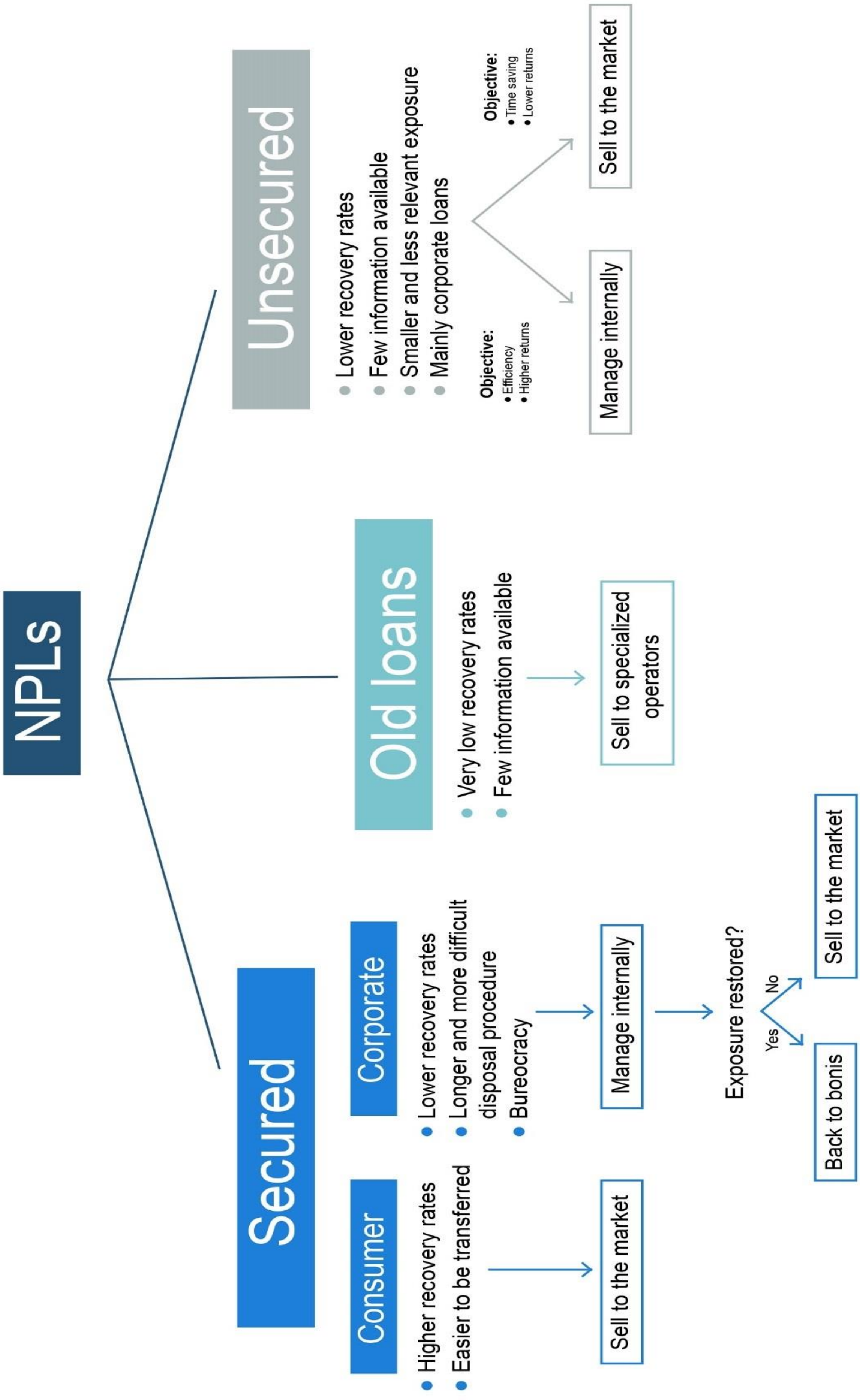
The conclusions here presented are the result of an analysis made by studying past deals, by analyzing market trends and by forecasting possible future scenarios. In its most recent work on the NPLs issue[104], the European Central Bank stressed the same points here mentioned:

- The importance of creating an internal structure that allows banks to perform the NPLs dismissal exploiting its own resources and capabilities;
- The creation of a new mindset targeting the issue of impaired assets before the debtor starts showing signals of financial instability. This cultural change implies the construction of a comprehensive complex system involving different business units inside the bank and including a monitoring setup and an adequate infrastructure for assuring the restoration of the distressed debt.
- Trained and skilled staff able to make evaluations on NPLs and to define classes of exposures according to their characteristics;
- A management team with the required knowledge of the overall NPLs market and the regulatory framework, that consider the NPLs issue an opportunity for restoring balance sheet, respect regulation and create positive returns;
- Clear targets to achieve and a long-term view;
- The definition of strategies that maximize banks interests respecting the regulation.

This evidence reinforces my opinion that the system comprehending banks, investors, institutions and regulators are moving in the right direction. Nevertheless, the speed of

[103] According to Banca IFIS, Market Watch NPL – The Italian Scenario, July 2017, 70% of the overall amount of bad loans disposed belongs to the mixed debtors' category. These kinds of deals are going to explode this year due to the MPS NPLs transaction closing expected for December.
[104] Banca IFIS Area NPL, "Market Watch NPL The Italian scenario, special edition NPL meeting", September 2017.

change of the Italian NPL market and its dynamic evolution make it possible these results being exceeded or updated in the coming years or months. Therefore, the following table summarizing the conclusions here deduced, must be interpreted in light of the NPLs market evolution and regulatory development.


NPLs
Secured
Consumer
Higher recovery rates
Easier to be transferred
Sell to the market
Corporate
Lower recovery rates
Longer and more difficult disposal procedure
Bureocracy
Manage internally
Exposure restored?
Yes
No
Back to bonis
Sell to the market
Old loans
Very low recovery rates
Few information available
Sell to specialized operators
Unsecured
Lower recovery rates
Few information available
Smaller and less relevant exposure
Mainly corporate loans
Objective:
Efficiency
Higher returns
Objective:
Time saving
Lower returns
Manage internally
Sell to the market

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