QUANTITATIVE EASING, STRUCTURED FINANCE AND SUPPORT TO THE REAL ECONOMY PROPOSALS ON ABS(*)(#)

1. INTRODUCTION

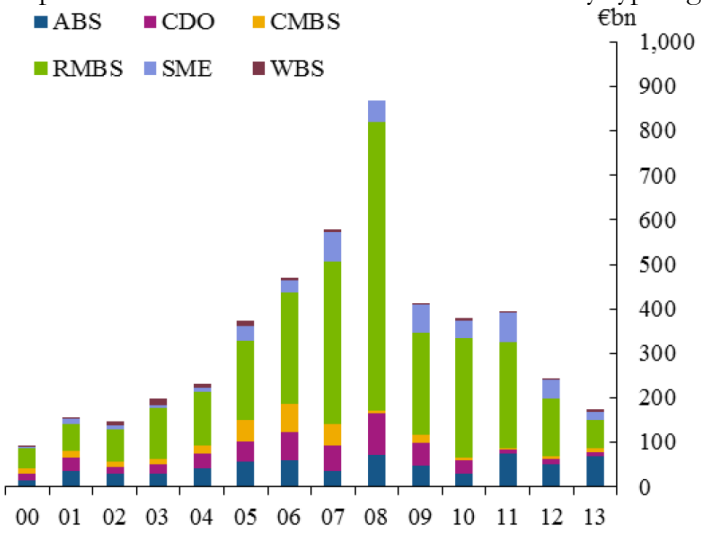
The banking regulation CRR/CRDIV has made European banks stronger and more resilient. However, the capacity of banks to lend is being weakened by the adjustments to the new regulatory framework and the balance-sheet repairs still on-going in many parts of the European banking system. The lack of credit is now confronting even sound businesses in some parts of Europe and is making the continent's economy weaker. It weighs on its recovery.

In the short term, improving the Eurozone banks profitability is not feasible. Thus, the market supply of new capital is low. Moreover, banks tend to reduce assets, including loans, in order to satisfy the targets imposed by the new regulation related to liquidity and capital ratios.

One way for firms is to gain direct access to financial markets through equity or bond instruments. However, these options are not always available, especially for smaller size firms and are time consuming.

An appropriate answer for such companies is to revitalize the market for securitized loans, in order to support bank lending. However this market, which never really took off in Europe before the crisis, has all but vanished since the financial crisis (**see Figure 1**).

Figure 1 – European securitization's market – break down by typology (source ECB/BoE)



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The opinions expressed in this paper are exclusively those of the authors and do not necessarily reflect the views of the Institutions to which they belong.

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The securitization of loans, if properly structured and regulated, represents a bridge between banking and market funding and can integrate other long term funding sources (*long-term wholesale*) for the economy, in particular SMEs.

In fact, as briefly discussed in the *Annex*, Asset Backed Securities (ABS) not only create new sources of funding, but also free up capital in banks' balance sheets to make new loans.

In this macroeconomic context ABS could therefore become an eligible candidate to effectively transmit to the real economy the non-conventional policy measures adopted by the European Central Bank.

In revamping the securitization market it is crucial to avoid the mistakes of the past. This implies well designed guidelines on the quality of the underlying loans and simple and transparent structuring techniques.

One of the most interesting recent proposal to revitalize the securitization market – focusing on the quality of the underlying loans – was elaborated by Eurofi (September 2014). The idea is to restrict, in a first phase, ABS to loans that have a default probability lower than 0.4% over 3 years (so-called *Prime High Quality Securitizations* - PHQS).

The proposal is based on a research made by the *Banque de France* (which also rates SMEs loans), according to which the number of loans to French firms with default probability over three years (<0.4%) is approximately 40,000 for a total amount of over 150 billion of euro.

Such a criterion is more stringent than the one currently required by the ECB for loans eligible as collateral (one-year default probability ≤ 1.5%) and should therefore contribute to improving investor confidence in ABS.

The proposal, however, as we shall try to argue in this paper, would have no significant systemic effect on many of the Eurozone Member Countries (MCs). If ABS are restricted to PHQS, in fact, what would be the eligible amount of issues in many of lower rating Eurozone MCs, and, in particular, in Italy? Also, what would be the incentives for banks, especially in terms of cost of capital, to transfer (securitize) loans from their high quality portfolios and replace them with potentially lower quality loans?

In Italy, for instance, historical data show that loans to firms only meet the criteria required by the ECB on the quality of collaterals and therefore the structuring of PHQS would include potentially very small amount, if any, of ABS issuing.

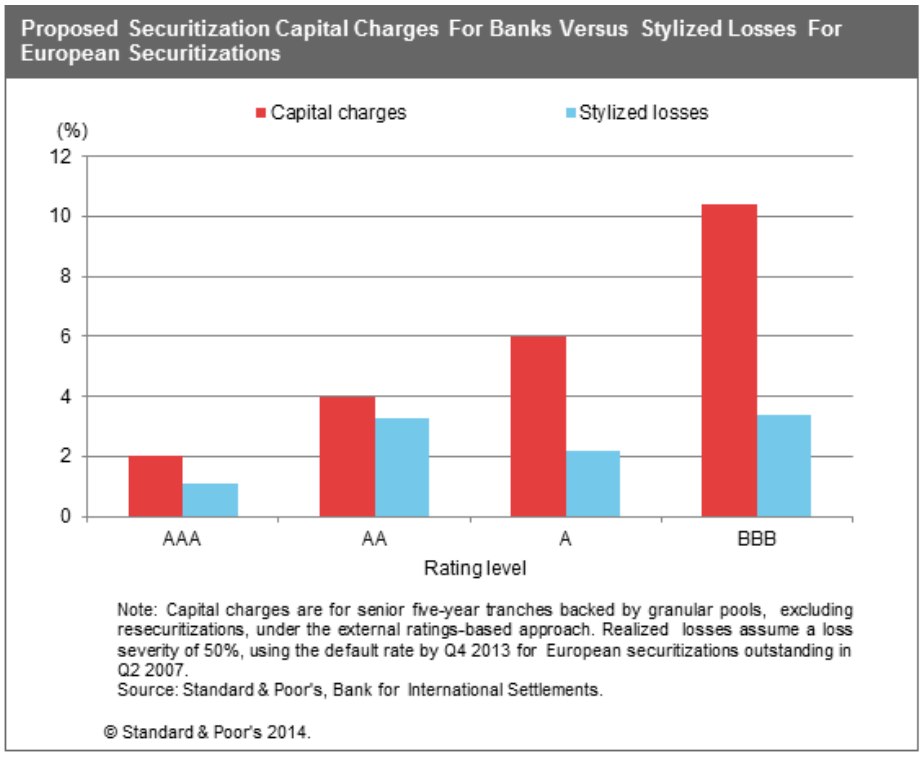
Moreover, given that the sale of assets through securitization should reduce the risk (and its weighting) for the originating banks, ABS would improve capital ratios and reduce the leverage. To make ABS attractive for European banks, a proper re-calibration of the risk weights of CRR/CRDIV is needed at least in terms of consistency[1]. In particular,

[1] In November 2013, Yves Mersch, Member of the Board of the ECB, openly criticized the lack of consistency of prudential regulation in the treatment of asset-backed securities with respect to the underlying loans of equal rating, comparing it to "calibrating the price of flood insurance on the experience of New Orleans for a city like Madrid."

regulators could work on the asymmetries between ABS and collaterals as far as their the risk weights treatments are concerned[2].

Based on very conservative assumptions on default rates, S&P estimates that a "AAA" tranche of securitized loans would absorb regulatory capital equal to twice the expected losses[3] (see **Figure n. 2**).

Figure n. 2 – Standard & Poor's analysis



There is currently a broad consensus among experts (but now also among regulators and policy makers) that, under the current rules, there is no "fair" correlation between capital requirements and the actual underlying risk of the securitized loans. Therefore, it is reasonable to expect regulatory re-calibrations[4].

This should give further boost to the European Central Bank's decision of 4th September 2014 and the statements of the President Draghi, recently reiterated at the press conference in Naples on October 2nd, 2014.

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(2) According to the current Standardized Approach, the risk weight for "A" rated ABS senior tranches is equal to 6%, compared with 4% for loans to firms with the same rating. Asymmetries increase for lower quality securities, as "BBB" rated ABS are subject to a risk weight of 10.4% compared with 8% for loans to firms with the same rating. Apparently, these differences are mainly due to the lack of liquidity on ABS market as a result of the financial crisis in 2008 (source: Bruegel, 2014).

(3) To calculate the "stylized"" losses, S&P assumes a "loss severity" of 50% and applies the default rates observed in the fourth quarter of 2013. According to the ECB, the range of default rates of ABS in Europe since the financial crisis (2007-08), is on average equal to 0.6-1.5%. In addition, the Central Bank states that, in Europe, the default rates on ABS having loans to SMEs as underlying are far lower than those of all kinds of securitizations, with a default rate of about 0.1%.

(4) Recently, two new EU Commission's Delegated Acts were issued in order to mitigate the liquidity coverage ratio for banks as well as for the implementation of the Solvency II Directive for insurance companies. Both Acts are aimed at relieving the regulatory treatment of ABS.

2. THE ASSET BACKED SECURITIES PROGRAM WITHIN THE ECB QUANTITATIVE EASING: ANALYSIS AND PROPOSALS

On 4th September 2014, the European Central Bank (ECB) announced a set of unconventional monetary policy measures (*Quantitative Easing* or QE) which include, among other things, the purchase of *"simple and transparent"* as well as of *"high quality, mezzanine guaranteed"* Asset Backed Securities (ABS).

In its statement, the ECB made it clear that loans granted outside European borders would not be eligible for "packaging" into ABS, and this in order to prevent that any Eurozone country could attempt to revert on the Euro system potential risks arising from loans granted outside Europe(5).

From a subsequent decision(6), it can be argued that the *high quality* level defined by the ECB as *eligible* collateral can be associated to a rating (7) equal to or greater than "single A"(8).

Operators are still waiting for a clear definition of what the ECB considers as "simple, transparent and mezzanine guaranteed ABS". While waiting for further instructions from the ECB, the market is currently assuming, also on the basis of informal statements(9), that:

- *"mezzanine guaranteed"* means a tranche with a guarantee, arguably even public, as close as possible to a "single A" level;
- *"simple, transparent"* means that structures which carry double or triple "*wrappings*" cannot be considered as eligible.

As widely known, the different Eurozone countries exhibit an heterogeneous riskiness highlighted by the spread on their Sovereign bonds. Currently, sovereign ratings range from "single B" for Greece to "triple A" for Germany.

A government guarantee on the *mezzanine tranche* is therefore expected to produce very different outcomes. It can uplift (upgrade) the quality (riskiness) of the underlying credit portfolio at best at the same rating level of the MC which provides the guarantee. This implies that *mezzanine tranches* can be potentially structured with "single B" rating in Greece, a "triple B" rating in Italy and "triple A" rating in Germany.

Each country will decide the scope of the guarantee by identifying the risk share of the underlying credit portfolio that it is willing to bear (*risk appetite*) – i.e. the maximum loss it is ready to write on its public books in case of default of the ABS structure up to the *guaranteed mezzanine tranche* level.

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(5) In some cases, like Germany, these loans account for almost 60% of the total.

(6) ECB decision n. 278/23 of 20/9/2014, § 4.3., lett. a).

(7) Refer to section 6.3 of Appendix 1 of ECB Guidelines 2011/14.

(8) "single A" rating is equivalent to a rating of at least "A3" from Moody's, "A-" from Fitch and/or Standard & Poor's as well as "AL" from DBRS.

(9) See ECB's President (Mario Draghi) Speech of 22/9/2014 and his statement: "…As for the guaranteed mezzanine tranches, their intrinsic credit risk would be comparable to that of the guarantor, be it a national or supranational entity….".

In this perspective, a Sovereign State could not use leverage indefinitely but should calibrate the scope of its intervention by issuing guarantees consistently with its total debt level.

Nevertheless, to the extent that – by appropriate structuring – the *junior tranche* will ensure first loss absorption, the government guarantee will become contingent and therefore it should not weigh on its public budget (not included in public debt and/or deficit level).

Hence, the *risk appetite* will be based on the overall level of risk associated with the MC's rating. For example, for a credit portfolio of rating quality "double C", a Greek Government's guarantee will produce a maximum risk appetite enhanced by two notches (from "double C" up to "single B"). This implies that Greek government may opt to limit its guarantee up to "triple C" or a maximum upgrade up to its sovereign rating level of "single B". *Mutatis mutandis*, for Germany, the maximum risk appetite would be seven notches (from "double C" up to "triple A"). This obviously allows "triple A" MCs to have a much wider scope when structuring ABS.

The risk appetite of the guarantor will determine the effective amount of liquidity and capital release that ABS produce in banks' balance sheets.

The risk appetite, the sovereign rating of the guarantor, and the credit quality of the loan portfolio, qualify the financial engineering of the ABS and thus the allocation of risks across the various tranches.

From what stated above and given that the credit quality of a specific loan portfolio tends to be better in countries with higher Sovereign rating, it becomes evident their advantage in structuring high quality ABS.

An attempt to level the playing field among the different Eurozone MCs can be found in the ECB measure if guarantee issues by a supranational entity would be considered[(10)]. It is clear that the potential *patronage* offered by a guarantee issued, for example, by a "triple A" supranational entity such as the European Investment Bank (EIB), alongside that issued by each national Government, is likely to significantly improve both the rating of the *mezzanine tranche* as well as the potential risk appetite of the guarantor country. But at the moment we cannot count too much on this possibility.

Finally, we do not know how many ABS the ECB intends to buy. It is, however, reasonable to assume that, as far as the *guaranteed mezzanine tranche* is concerned, the ECB will act as for collateralized loans on a pro-quota basis, linked to the size and the riskiness of each Eurozone MC.

It would therefore be simplistic to assume that, through a government guarantee, MCs with Sovereign rating below "single A" would be able to structure ABS for indefinite

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(10) Refer to ECB's President (Mario Draghi) Speech of 22/9/2014 and his statement: "…As for the guaranteed mezzanine tranches, their intrinsic credit risk would be comparable to that of the guarantor, be it a national or supranational entity….".

quantities whose *senior* and *mezzanine tranches* could be sold under the ECB program, thus avoiding the risk of selling those *tranches* on financial markets.

In conclusion, MCs with sovereign rating below "single A" will have to consider all the possible guarantee schemes in order to maximize the amount of the credit portfolio that can be securitized under the ECB program, considering that these kinds of transactions may significantly contribute to mitigate the credit crunch as well as to reduce the current gap among Eurozone Countries with different sovereign ratings.

3. THE STRUCTURING OF A GUARANTEED ABS: THE ITALIAN CASE

In this section, a few possible ABS schemes with underlying assets rated from "double C" to "double B" are proposed. The schemes are assumed considering the Italian case (sovereign rating "triple B") as a reference country. It is assumed that all the *tranches* (with the exception of the *junior* one) are bought by the ECB or by institutional investors in the case of a government guarantee on the *mezzanine tranches*; moreover, the guarantee can be autonomous or co-guaranteed by the EIB[(11)].

In our case the *junior tranche* is bought by the bank that sells the ABS credits portfolio.

The *junior tranche* is engineered to result lower in magnitude than that one belonging to an ABS with an unsecured *mezzanine tranche*. As a consequence of this risk transfer a reduction of the *junior tranche* yields can be assumed, providing benefits, in terms of the overall riskiness, to the ABS capital structure.
The *junior tranche* could also be acquired by a third subject that would play the role of a *bad bank*. But we will not consider such a possibility here.

The simulations that follow are an attempt to frame an ideal matrix for different situations which characterize the Eurozone countries.

Italian institutional investors hold more than half of the "triple B" rated government debt securities. This portfolio is not *risk-free*: for example, investing in a 5 year BTP implies theoretically a 7% probability of losing more or less half of the capital invested. From the point of view of institutional investors, this higher risk widens the range of admissible investments, since a BTP and a structured product that shows the same loss probability are financially equivalent.

The *guaranteed mezzanine tranches* embed a risk similar to government bonds which implies that institutional investors could replace a rather "small portion" of government bonds in their portfolio with these ABS notes ("substitution scheme"). Obviously, the structure of the guarantee should be designed to assure that the management of risks underlying the government bonds will be dynamically aligned with those of the *mezzanine tranches*.

(11) The data used in the following examples come from recent reports of Rating Agencies and from other official sources. All the results contained in this paper are provisional and subject to changes and revisions.

Given the bid-to-cover level at Italian government bonds' auctions over the last two years, it is reasonable to assume that the market is able to absorb the government bonds released by the "substitution scheme".

Moreover, our proposal takes into account the need for adequate liquidity provisions to deal also with the residual part of *senior tranches* that potentially will not be purchased by the ECB nor by institutional investors that could adopt also for the *senior tranche* the "substitution scheme".

3.1 Structuring of a government guaranteed ABS with an underlying portfolio composed by low quality assets

The structuring of a government guaranteed ABS with an underlying portfolio composed by banking loans rated "double C" includes a government guarantee on the *mezzanine tranche*. The government is characterized by a *risk appetite* of 30%; consequently, the originating banks are expected to buy the re-dimensioned *junior tranche* equal to 12%.

Given the above hypothesis, the resulting structure (base 100) is the following:

Junior	12
Mezzanine (BBB)	36
Senior (A)	52

The risk of the *mezzanine tranche* is aligned to Italy's credit risk and in this way it could be underwritten, together with the *senior tranche*, by the ECB until depletion of the available *plafond*. The residual part of the *mezzanine tranche* (or the whole amount, in the absence of the ECB intervention) should be bought by institutional investors through the "substitution scheme" described in **§ 3**.

3.2. Structuring of a government/EIB guaranteed ABS with an underlying portfolio composed by low quality assets

The structuring of a government/EIB guaranteed ABS with an underlying portfolio composed by banking loans rated "double C" includes a guarantee on the *mezzanine tranche* provided by both the government and the EIB. In this way the two guarantors share the same amount of the overall *risk appetite* of 30%; consequently, the originating banks are expected to buy the re-dimensioned *junior tranche* equal to 12%. The EIB support would enhance the *rating* of the *senior* and *mezzanine tranches* as well as increase the weight of the *senior tranche* (see above **§ 3.1).**
Given the above hypothesis, the resulting structure (base 100) is the following:

Junior	12
Mezzanine (A)	33
Senior (AA)	55

The risk of the *mezzanine tranche* is aligned to Italy's credit risk and mitigated by the EIB guarantee, contributing to its *upgrade*. This *tranche* could be underwritten, together with

the *senior tranche*, by the ECB until depletion of the available *plafond*. The residual part of the *mezzanine tranche* (or all of it, in the absence of the ECB intervention) will be bought by institutional investors through the "substitution scheme" described in **§ 3**.

3.3 Structuring of a government guaranteed ABS with an underlying portfolio composed by average quality assets

The structuring of a government guaranteed ABS with an underlying portfolio composed by banking loans rated "double B" includes a government guarantee on the *mezzanine tranche*. The government is characterized by a *risk appetite* of 9%; consequently, the originating banks are expected to buy the re-dimensioned *junior tranche* equal to 6%.

Given the above hypothesis, the resulting structure (base 100) is the following:

Junior	6
Mezzanine (BBB)	15
Senior (A)	79

The risk of the *mezzanine tranche* is aligned to Italy's credit risk; in this way it could be underwritten, together with the *senior tranche*, by the ECB until depletion of the available *plafond*. The residual part of the *mezzanine tranche* (or all of it, in the absence of the ECB support) should be absorbed by institutional investors through the "substitution scheme" described in **§ 3**.

3.4. Structuring of a government/EIB guaranteed ABS with an underlying portfolio composed by average quality assets

The structuring of a government/EIB guaranteed ABS with an underlying portfolio composed by banking assets rated "double B" includes a guarantee on the *mezzanine tranche* provided by both the government and the EIB. In this way the two guarantors share the same amount of the overall *risk appetite* of 9%; consequently, the originating banks are expected to buy the re-dimensioned *junior tranche* equal to 6%. The EIB intervention would enhance the *rating* of the *senior* and *mezzanine tranches* and increase the weight of the *senior tranche* (see above **§ 3.3).**

Given the above hypothesis, the resulting structure (base 100) is the following:

Junior	6
Mezzanine (A)	12
Senior (AA)	82

The risk of the *mezzanine tranche* is aligned to Italy's credit risk and mitigated by the EIB contribution, thus allowing its *upgrade*. This *tranche* could be underwritten, together with the *senior tranche*, by the ECB until depletion of the available *plafond*. The residual part of the *mezzanine tranche* (or all of it, in the absence of the ECB intervention) should be bought by institutional investors through the "substitution scheme" described in **§ 3**.

4. CONCLUSIONS

This paper is a preliminary attempt to offer some schemes of ABS's structuring, in light of the recent ECB measures.

While preserving a good level of credit quality for the securitized assets, different models are proposed in order to cover a broad range of potential risks related to the underlying portfolios of Eurozone banking loans. The calculations are focused on the Italian case, but the methodology can be easily generalized to other Eurozone countries.

A summary of our schemes is contained in the table below:

Credits Portfolio Rating	**Double C**				**Double B**		
	Tranche	*Rating*	%		*Tranche*	*Rating*	%
Government Guarantee	Junior		12		Junior		6
	Mezzanine Guaranteed	BBB	36		Mezzanine Guaranteed	BBB	15
	Senior	A	52		Senior	A	79
	Risk Appetite		30		Risk Appetite		9
Guarantee 50% Government + 50% EIB	Junior		12		Junior		6
	Mezzanine Guaranteed	A	33		Mezzanine Guaranteed	A	12
	Senior	AA	55		Senior	AA	82
	Risk Appetite		30		Risk Appetite		9

The final choice among the different outcomes will depend on the *risk appetite* of guarantors, on market evaluation and on the criteria and the size of the ABS purchase program that will eventually be defined by the ECB.

According to our preliminary simulations, the issuing of **ABS in Italy could reach up to € 50 billion** (where half or event two third of this amount may be earmarked to new loans) within an ABS purchase program launched by the ECB of a maximum amount of € 500 billion over the next two years.

ANNEX

ASSET BACKED SECURITIES – AN OUTLINE

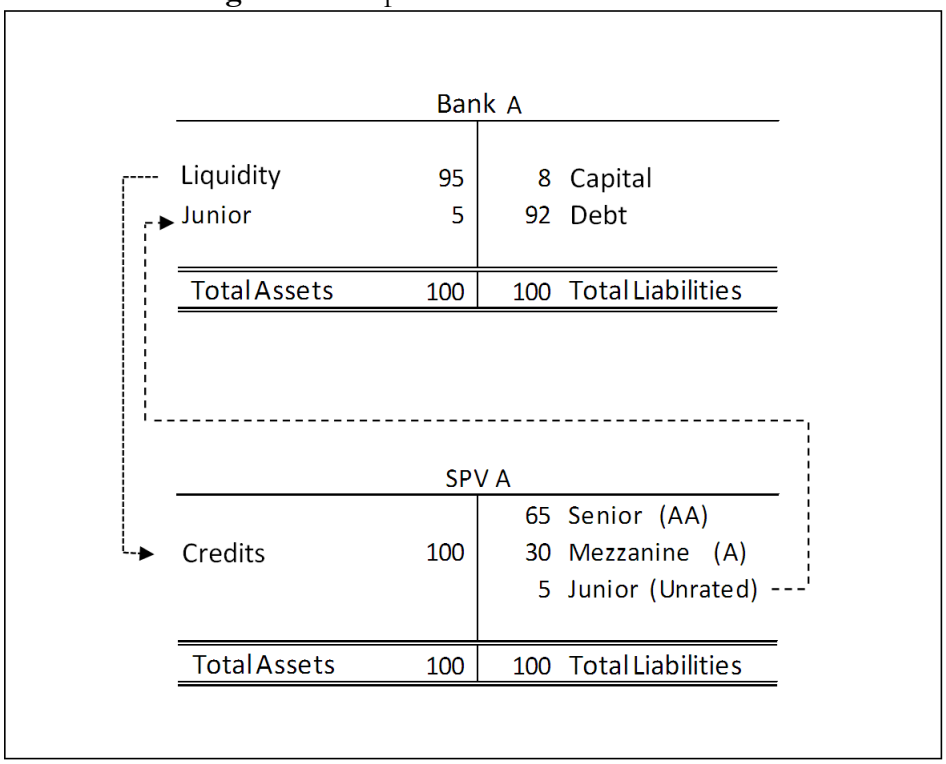
ABS are financial assets issued by legal entities set up *ad hoc* (*Special Purpose Vehicle* – SPV) in the context of securitization transactions. (**Figure**). In particular, a bank – in the perspective of freeing financial resources to be invested or to improve its balance sheet – transfers specific "asset classes" (for example loans, mortgages, of other credits) to the SPV

The SPV receive the liquidity needed to acquire the assets from the bank by issuing ABS. Consequently, the SPV is structured in order to be risk-neutral. In particular:

- ABS reflect the overall risk of the underlying assets, that are re-arranged in a standardized way producing different categories of bundled assets (*tranches*), with different and decreasing level of risk (respectively *junior*, *mezzanine* and *senior*);
- ABS cash flows are aligned with those of the underlying assets (by using so-called *asset swaps)*.

The *tranches* with lower risk are placed on the market, while the ones with higher risk (*junior*) – which are engineered to absorb the portfolio losses – are usually bought directly by the bank.

Figure – example of a securitization scheme



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