



Valuation of difference in treatment Banco Popular Español

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Important Notice

The Report has been prepared for the purposes of Article 20 of the Single Resolution Mechanism Regulation (SRMR). That is to say, the Report is a fair, prudent and realistic valuation of the assets and liabilities of Banco Popular and it is prepared with independence from the Board and intended for the Board.

The Report is exclusively addressed to our client, the Single Resolution Board ("SRB"). We acknowledge SRB's right to make a copy of our final Report public, observing confidentiality such as the identity of Deloitte staff.

The Report, and the information contained herein, does not constitute, and cannot be understood or construed as, any recommendation or advice as to whether any kind of action or process should be initiated by any party.

Neither Deloitte nor any of its affiliates, employees or partners, assume any liability or responsibility, and shall not under any circumstances whatsoever be under any liability or responsibility, for the SRB or any third party's use, or the results of such use, of any information contained in the Report, and in particular, but not limited to, for the disclosure of confidential or sensitive information included in the Report.

As specified under Article 1 of the Commission Delegated Regulation (EU) 2018/344 – 14 November 2017 (DR), the scope of the Report is to assess the treatment that shareholders and creditors in respect of which resolution actions have been affected would have received, or the relevant deposit guarantee scheme had the entity entered into normal insolvency proceedings at the resolution decision date.

In preparing the Report, Deloitte has acted as an Independent Valuer.

Neither Deloitte nor any of its affiliates, employees or partners, assume any liability or responsibility, and shall not under any circumstances whatsoever be under any liability or responsibility, to the SRB or any third party for whatever decision taken or action adopted either by the SRB or any such third party in reliance on the Report or any other advice, information or opinion provided by Deloitte to the SRB.

The Report does not include verification work and is not, and cannot be used or understood as an audit report under any auditing standard. No due diligence or other auditing of numbers or data has been performed in the Report.

Although a number of legal issues have been identified and/or analysed throughout the Report, the Report does not constitute the provision of legal advice in any way.

The Report, and the information contained herein, has been prepared based on unaudited financial information as of 6 June 2017 when available, or as of 31 May 2017 when the 6 June 2017 information was not available, as well as on financial and non-financial information obtained from public sources, including digital and written information media (such as Bloomberg, S&P Capital IQ, research reports). All the information provided to us through the Virtual Data Room facilitated by Banco Popular Español S.A. (hereinafter "Banco Popular" or "the Bank") has also been taken into account.

We have worked under the assumption that no information that might have changed, qualified or replaced our statements and conclusions within the Report, has been omitted. Likewise, we have not carried out any review of the completeness, accuracy, truthfulness, authenticity, validity and integrity (or the existence of any other documentation or information that might alter the content or analysis of the same) of the information provided, and we have assumed that this information is accurate, true, reliable and complete in all aspects. Accordingly, the content and conclusions herein described could be different if any of the information used was not accurate, true, reliable and complete in all aspects.

In addition to the foregoing, it must be highlighted that, within the information reviewed, there are a number of data gaps and inconsistencies in the available information, which have both adversely impacted our work and caused delays in the production of the Report.

Events and circumstances frequently do not occur as expected and there will usually be differences between prospective and hypothetical scenarios and actual results, and those differences may be material. Accordingly, to the extent that any of the information used in this analysis and Report requires adjustment or that actual results could develop or could have developed in a different way, the resulting content and conclusions herein described may be different.

The content and conclusions herein are based on prospective scenarios. Some assumptions or projections could materialise differently and unanticipated events and circumstances may occur during the periods considered by us. These could include major changes in the economic environment; significant increases or decreases in interest rates and/or terms or availability of financing; changes in the real estate market; and/or major regulatory changes. Therefore, the actual outcome could have been different to the one concluded and variations could be material and have an impact on the content and conclusions stated herein. We consider the prospective scenarios and assumptions we have developed in our analysis to be appropriate, even if alternative scenarios could be developed.

We accept no responsibility for the reliability of the information reviewed to the extent it is inaccurate, incomplete or misleading, or for matters not covered by the Report or unidentified due to the limited nature of our enquiries.

We consider that the management of the Bank is the body responsible for the information and for the data that they made available to us.

This final report is issued as at 12 June 2018 under our Specific Contract with the SRB. Our fieldwork was substantially completed as at 23 March 2018 and a draft report was circulated on 20 April after which we have not updated the content of the report or reassessed data and assumptions. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

Without prejudice to the generality of the foregoing, which applies to all and any of the areas of the Report, we also refer to the relevant areas where a section called "Sources of uncertainty" containing specific limitations and assumptions has been included.

For your convenience, the Report has been made available to you in electronic copy format.

Executive Summary

Key messages

On 7 June 2017, in the first ever exercise of its powers under the Bank Recovery and Resolution Directive (BRRD), following a failing or likely to fail decision by the European Central Bank ("ECB") Single Supervisory Mechanism ("SSM") (indicating pending or actual insolvency), the SRB, as resolution authority for the Euro area, took resolution action in respect of Banco Popular Español ("the Bank") resulting in the write down and conversion of ~€2bn of subordinated debt and the subsequent sale of the Bank's shares for €1 to Banco Santander S.A. (Santander).

This provides that when resolution action is taken no creditor or shareholder written down or converted because of resolution action ("Affected Shareholders and Creditors") should incur greater losses than they would have incurred if an institution had been wound up under normal insolvency proceedings.

The Report provides a **valuation of the difference between the treatment of shareholders and creditors in the resolution, as compared to a normal insolvency proceeding**. The Report, which has been prepared by us as Independent Valuer, underpins the NCWO safeguard and will ultimately assist in the SRB decision making to determine whether compensation is payable to Affected Shareholders and Creditors.

The opening of a normal insolvency proceeding for the Bank on 7 June 2017 **would have resulted in an unplanned liquidation. This is by its nature value destructive**, for reasons including: the abrupt cessation of business; customer attrition; an inefficient asset realisation process; and additional (often significant) costs and claims. In the case of the Bank, the insolvent liquidation would be an unprecedented event in Spain, given its status as 6th largest bank and a major player in key sectors such as mortgage finance and lending to SMEs and small corporates.

We conclude that **for the Affected Shareholders and Subordinated creditors, no recoveries would have been expected in a normal insolvency proceeding**, and there is therefore no difference in treatment in comparison to the resolution action taken. We further estimate that recoveries for other classes of creditors, unaffected by the resolution and including at other Group entities, would have been lower in an insolvency proceeding.

We have considered a number of alternative scenarios and possible strategies that a liquidator would apply to maximise realisations to creditors in a reasonable period, the most optimistic of which was a 7-year liquidation and work out. The conclusion that Affected Shareholders and Creditors would not have received better treatment under an insolvency proceeding, compared to resolution, is the same in all scenarios considered. **In the most optimistic scenario considered the total estimated asset realisations are c. 82% of the 6 June 2017 balance sheet.**

The most important factors driving these conclusions are:

- A significant reduction in the valuation of the Bank's loan portfolio, driven by estimated prepayment behaviour on the performing loan portfolio and discounts required to achieve disposal of the non-performing and 'rump' performing loan portfolios
- Reductions in the value of securities, real estate, intangible, and tax assets
- Liquidation costs and the estimates of legal contingencies

Our analysis of such a hypothetical scenario by necessity depends on a number of assumptions. In this case, we have taken a conservative approach to estimating whether better treatment would have resulted from an insolvency proceeding and **adopted several significant assumptions which are favourable to the Affected and Shareholders creditors**. In particular, we have assumed:

- that the liquidator would (as far as possible) adopt a work out policy for assets to maximise realisations over time, despite potential restrictions on their remuneration after the first 18 months of the liquidation;
- no impact of disruption and contagion from the failure of a large, potentially systemic, bank in Spain, which would further lower recoveries; and
- no crystallisation of additional litigation claims, which often occur as a result of liquidation.

The Report, and the information contained herein, has been prepared based on unaudited financial information as of 6 June 2017 when available, or as of 31 May 2017 when 6 June 2017 information was not available, and on financial and non-financial information obtained from public sources, including digital and written information media (such as Bloomberg, S&P Capital IQ, research reports).

Legal background

Valuation of difference in treatment underpins the NCWO safeguard that no creditor or shareholder written down because of resolution should incur greater losses than they would have incurred if an institution had been wound up under normal insolvency proceedings. Valuation of difference in treatment is performed pursuant to Article 20 of SRMR, Article 74 and 75 of BRRD, Articles 4 and 5 of Law 11/2015 and Article 10 of RD 1012/2015, considering the regulatory technical standards of difference in treatment in resolution as specified in DR (EU) 2018/344. In this context, it will be determined whether compensation is payable to Affected Shareholders and Creditors.

Choice of insolvency scenario

Insolvency proceedings in Spain are governed by Act 22/2003 on Insolvency (the Spanish Insolvency Act); there is no specific law governing bank insolvencies in Spain. We consider that, given Banco Popular's banking licence would be revoked with the declaration of insolvency¹ thereby forcing in an immediate cessation of operations and precluding a sale of the business as a going concern, liquidation would begin immediately.

In addition, according to the SRB resolution, on 6 June 2017, the ECB has concluded that the Institution was failing or likely to fail on the bases of Article 18.4.c SRMR.

In this context, we have performed a valuation under a liquidation scenario. Liquidation consists of an accelerated realisation of assets, with no minimum binding price², and payment of net realisation to creditors in accordance with the hierarchy established by the Spanish Insolvency Act.

In the case of Banco Popular, we assume that it will not be possible to complete a sale of business as a going concern (for the reasons noted above), and therefore this analysis is based on an orderly sale of assets, either packaged into portfolios or piecemeal. In addition, an actual transaction might be concluded at a higher value or at a lower value than we have estimated, depending upon the circumstances of the transaction and the business, knowledge and motivations of the buyers and sellers at that time.

We have estimated the insolvency outcome for Banco Popular on a legal entity basis, reflecting the nature of the insolvency process under the Spanish Insolvency Act. We have also considered the impact of the Bank's insolvency on the rest of the Group, focused on the most significant entities which, together with Banco Popular are: Banco Pastor, S.A.U. (hereinafter "Banco Pastor"), Popular Banca Privada, S.A. (hereinafter "Banca Privada") and Banco Popular Portugal, S.A. (hereinafter "Banco Popular Portugal").

1 Article 8 of Law 10/2014.

2 Article 149.1.1^a. Spanish Insolvency Act.

Liquidation timeline

As a general principle, the time given to a liquidator to realise assets is important in terms of how much value can be extracted for the benefit of creditors; this is even more relevant for an entity of the size and complexity of Banco Popular.

We note that as a result of recent legislation changes designed to speed up the liquidation process, a liquidator's remuneration is limited to time incurred in the first 12 months of the process, albeit for complex cases may be extended by an additional 6 months (two extensions of 3 months) where agreed by the Court³. Currently, there is no provision under the Spanish Insolvency Act to extend the liquidator's ability to draw remuneration for a period in excess of 18 months and to do so would require a change in the law.

However, given the complexity of the hypothetical liquidation proceeding, we have not assumed this is a barrier to longer liquidation scenarios. Accordingly, for the purpose of the Report, and considering that no comparable liquidation case has ever taken place in Spain, we have assessed three alternative time scenarios, including two different cases for each of them (high and low cases, referred to as best and worst throughout the Report), and have analysed the treatment received by Banco Popular's Affected Shareholders and Creditors under each, as follows⁴:

1. Scenario 1: 18 months (7 June 2017 until 31 December 2018). Although we consider this the maximum (12-18 months) liquidation period prescribed by Spanish Insolvency Act and for that reason we included it in the Report, we believe that both the size and complexity of the Bank would make Scenario 1 extremely unlikely.
2. Scenario 2: 3 years (7 June 2017 until 31 December 2020). From an operational point of view, we consider three years as a minimum period to liquidate assets in an efficient way. In addition, in Banco Popular's case, we note that a reasonable portion (>50% of the total) of the Bank's loan portfolio matures during this period.
3. Scenario 3: 7 years (7 June 2017 until 31 December 2024). This would represent a longer term work out of assets to obtain higher recoveries. In Banco Popular's particular case, we note that a sufficiently large portion (~75% of the total) of the Bank's loan portfolio should naturally amortise during this period.

We have followed different asset realisation strategies for each asset class. Methodologies and assumptions used for estimating realisation values are outlined in more detail in the following chapters.

Estimated outcomes

In the scenarios considered, the recovery obtained through the assets realisation exercise, net of costs, of the Bank ranges between 75% and 82% in the most optimistic case of its total assets as of 6 June 2017.

This implies that affected shareholders and subordinated creditors would receive no recoveries, and other creditors not affected by the resolution would receive lower recoveries, complying with the principle of NCWO. In comparison to the resolution action taken, some key drivers of the differences in treatment are:

- Abrupt cessation of business.
- Customer attrition – including higher than normal prepayment levels affecting the loan portfolios as good quality borrowers refinance to alternative funding providers.
- Liquidation and restructuring costs - including collective dismissal payments due to employees, and contract termination costs.

³The maximum period for which the Insolvency Administrator can be remunerated during the liquidation process, as set out in the Transitory Provision Third of Law 25/2015.

⁴ Approximate durations – calendar years used for simplicity of presentation.

- Inefficient sales process – specifically if the liquidator has a time constraint to finalise their work (e.g. in an 18-month scenario) or reflecting market capacity issues (for example there is a large number of foreclosed properties and a property market which has not fully recovered following the Spanish property crash). In this case, the sale of the Bank to Santander conveys a lower value depreciation given that it implies a transfer of an operating business.

We have not considered several factors which could further reduce recoveries for creditors:

- Financial Stability Shock - we have not included the impact of disruption and contagion from the failure of this potentially systemic bank in Spain, which could further reduce recoveries.
- Increased litigation - we have not included potential additional claims from creditors or shareholders that may crystallise as a result of liquidation, given the subjectivity of any assumptions that would be required in this regard. This would make the situation worse for Affected Shareholders and Creditors.

The table below shows the estimated realisation value of each asset class as well as the estimate of liquidation costs for each of the scenarios analysed.

Estimated assets realisation values in liquidation (€m)

Assets	NBV (6 June 2017)	18M Scenario		3Y Scenario		7Y Scenario	
		Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
Equity, fixed income and derivatives portfolios ⁽¹⁾	21,543	20,410	20,392	20,410	20,392	20,410	20,392
Loans and receivables	83,330	66,521	63,430	68,499	65,660	71,069	68,579
Joint ventures, associates and subsidiaries	9,908	8,382	7,496	8,382	7,496	8,382	7,496
Real Estate assets	3,728	2,514	2,252	2,832	2,624	2,946	2,758
Intangible assets	1,198	-	-	-	-	-	-
Tax assets	5,692	2,334	2,334	2,334	2,334	2,334	2,334
Other assets	1,045	166	166	166	166	166	166
Total insolvency realisation		100,327	96,067	102,624	98,669	105,307	101,722
Liquidation costs		(990)	(989)	(1,078)	(1,077)	(1,193)	(1,192)
Total realisation for shareholders & creditors		99,338	95,078	101,546	97,593	104,114	100,531

(1) Equity, fixed income and derivatives portfolios includes cash and cash with the Central Banks totaling €1,334m, and excludes fixed income from the loans and receivables portfolio of €654m.

Source: Banco Popular Individual Financial Statements, Deloitte analysis

The chart below shows creditors' losses in an insolvency scenario in comparison to resolution. We conclude that Affected Shareholders and Creditors would have not received a better treatment under an insolvency scenario, compared to resolution.

Furthermore, the following is worth noting under the proposed liquidation scenario:

- Even in the most optimistic scenario – best case, 7-year period – losses would be greater than under resolution, with unsecured creditors also incurring losses;
- Shareholders and creditors of other legal entities of the Group would suffer losses in all assumed scenarios, whereas under the resolution scheme only Affected Shareholders and Creditors of the Bank were impacted; and
- The Deposit Guarantee Scheme (hereinafter DGS), would suffer losses of between €1,800m and €2,200m in Banco Pastor.

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NCWO Outcome for Banco Popular legal entity (Creditor losses)
(€bn)



(1) This includes €2.0bn of subordinated debt and €8.6bn of intra-group debt, totaling €10.6bn.

(2) All creditor's losses in resolution (€11.4bn) were suffered by the shareholders and subordinated creditors of Banco Popular legal entity.

Source: Banco Popular Individual Financial Statements, Deloitte analysis

1. Introduction

On 6 June 2017, the ECB SSM concluded that the Bank was failing or likely to fail (FOLTF)⁵ indicating that the Bank would, in the near future, be unable to pay its liabilities as they fell due, and communicated its conclusion to the SRB⁶.

On the same day, the SRB in its Executive Session met to consider whether resolution action had to be taken.

On 7 June 2017, the SRB took resolution action in respect of Banco Popular, having assessed that the conditions for resolution were met⁷, namely:

- The entity was failing or likely to fail;
- There was no alternative private sector measure or supervisory action that could have prevented the failure of the institution within a reasonable timeframe; and
- Taking into account the nature of the Bank's activities, size and importance to the Spanish economy overall, resolution action was necessary in the public interest.

In the context of the SRB's resolution scheme, the SRB decided that, of the four alternative resolution tools available under the BRRD, the sale of business tool was the most suitable tool available to meet the resolution objectives.

The events leading to this are set out in the SRB's Resolution Decision, including how, as part of its contingency planning an auction process was run by the Spanish Fund for Orderly Bank Restructuring (FROB), as the National Resolution Authority, building on the Bank's own sale process that had run for some time prior to resolution⁸.

On 7 June 2017, one single binding offer was received, following an auction process.

Informed by the outcome of this process, the SRB made the decision to exercise its powers of write down and conversion of shares and other capital instruments (as detailed below) and to sell the Bank to Santander for €1.

As a result, the FROB implemented the resolution scheme adopted by the SRB, namely:

- To reduce Banco Popular's capital (€2,098,429,046) to zero through the write down of all its ordinary shares (4,196,858,092) to establish a non-distributable voluntary reserve.
- To simultaneously increase its capital through the conversion into shares of Additional Tier 1 capital instruments (€1,346,542,000).
- To subsequently reduce share capital to zero through the write down of the shares subscribed by way of the conversion of Additional Tier 1 capital instruments and to establish a non-distributable voluntary reserve.
- To simultaneously increase its capital through the conversion into shares of Tier 2 capital instruments (€684,024,000).
- To subsequently transfer these new shares to Santander for consideration of €1^{9,10}.

⁵ Article 18(4)(c) SRMR.

⁶ Article 18(1) subparagraph 2 SRMR.

⁷ Article 18(1) SRMR.

⁸ SRB Resolution Decision.

⁹ Decision adopted by FROB's Governing Committee on 7 June 2017.

¹⁰ SRB Notice summarising the effects of the resolution action taken in respect of Banco Popular Español.

The resolution scheme was endorsed by the European Commission (on 7 June 2017) which noted that the conditions for resolution were met and that the scheme involved no State aid nor aid from the Single Resolution Fund (SRF)¹¹.

1.1. Purpose of this Valuation

Article 20(16)-(18) of SRMR and 74(2) of the BRRD requires a "valuation of difference in treatment for the purposes of assessing whether shareholders and creditors would have received better treatment if the institution under resolution had entered into normal insolvency proceedings". In this regard, valuation of difference in treatment is a safeguard to protect the rights of shareholders and creditors whose capital instruments were written down and/or converted under the resolution scheme (Affected Shareholders and Creditors).

Specifically, Valuation of difference in treatment is required to determine:

- The treatment that Affected Shareholders and Creditors would have received if Banco Popular had entered into normal insolvency proceedings when the authority decided to apply the resolution strategy (counterfactual treatment)¹²;
- The treatment that Affected Shareholders and Creditors received in resolution (actual treatment);
- The difference between the actual treatment and the counterfactual treatment.

Pursuant to Article 74(3) of the BRRD, the valuation shall:

- Assume that the institution under resolution with respect to which the resolution action or actions have been effected would have entered normal insolvency proceedings at the time when the decision referred to in Article 82 was taken;
- Assume that the resolution action or actions had not been effected;
- Disregard any provision of extraordinary public financial support to the institution under resolution.

If the valuation determines that Affected Shareholders and Creditors have incurred greater losses through the resolution scheme than they would have incurred under normal insolvency proceedings, they will be entitled to compensation for the difference.

1.2. Legal and regulatory framework for Valuation of difference in treatment

The BRRD sets the general legal framework to produce the Report.

The BRRD was transposed into the Spanish legal framework through Law 11/2015 and by the provisions of RD 1012/2015, which governs the process to resolve credit institutions.

In performing our analysis, we have taken into account the SRMR and the DR (EU) 2018/344, which was adopted on 14 November 2017 and entered into force on 29 March 2018 and which sets out technical standards for valuation of difference in treatment.

1.3. Sources of information and key dates

The purpose of this section is to:

- Summarise the information gathering process; and

¹¹ European Parliament's Briefing on the resolution of Banco Popular.

¹² Article 20(17)(a) SRMR.

- Describe our approach to the information disclosed.

1.3.1. Our information request

We requested through the SRB, by way of initial request, a wide range of information that we considered relevant for preparing Valuation of difference in treatment in relation to Banco Popular and its subsidiaries, including detailed information on key legal entities in the Group. Thereafter, we interacted directly with the Bank for additional information or clarifications. The requested information was uploaded by the Bank through a virtual data room (VDR) available through Intralinks.

Under the BRRD¹³ and the Article 20.6 of the SRMR, which sets out how the valuation should be performed, the Valuation Date is to be the date of resolution – 7 June 2017. Accordingly, we requested the information should be made up to close of business on the preceding day (6 June 2017). This date is referred to in the Report as the “Resolution Date” or “Valuation Date”.

The above has also been validated “ex post” (after the Resolution Date) by Regulation (EU) No 344/2018 of the European Commission of 9 March 2018, which establishes that this valuation should be based on the available information on the date of resolution. In this regard, information obtained after the Resolution Date can only be used where it could reasonably have been known on the Resolution Date.

The categories of information obtained include:

- General financial information - including audited and unaudited financial statements and Management Accounts, both at a consolidated and legal entity level;
- Details of the Bank’s assets - including details of the loan book and collateral data set as at the Valuation Date;
- Details of the real estate portfolio;
- Details of Current Tax Assets (CTA) and Deferred Tax Assets (DTA) positions;
- Joint venture agreements and financial statements;
- Derivative contracts;
- Details of the equity and fixed income data tape and the justification of their valuation;
- Details of the Bank’s liability profile - including the liability data template as at the Valuation date;
- Transactional information - including information in relation to potential bids for some of the Bank’s assets;
- Details of current or pending legal proceedings;
- Information required to estimate the costs of liquidation - including details as to the Bank’s cost base including key contracts and leases; and
- Detailed employee information - including their salaries and bonuses.

1.3.2. Description of our approach to the information disclosed

The Bank established a dedicated team for this valuation project. We were in regular contact with the Bank throughout the process to obtain, understand and analyse the information requested, including to resolve uncertainties on the data required for the valuation.

¹³ Article 74.3 a) BRRD.

We encountered several challenges and delays in the process, including:

- Issues for the Bank in producing data as of 6 June, which is not an ordinary reporting date, and/or in terms of requests for greater detail than the Bank was ordinarily used to preparing;
- Problems with the quality and the consistency of the data;
- Lack of certain information.

Resolution of these issues required a significant number of interactions with the Bank.

Where we were unable to obtain information, or data was not reliable, we have:

- In the case of data being unavailable as at the Resolution Date, used information as of 31 May 2017 for those areas where the variations during that 6-day period were not considered material;
- Where there were other data gaps used appropriate assumptions or proxies;
- Focused on the most material items only in terms of their potential impact on Affected Shareholders and Creditors.

Inevitably, this has delayed the process in performing our work. Both the interactions and identifying the solutions consumed much effort and time, which delayed the production of the Report and increased the number of assumptions we had to make.

There were two specific areas where we faced significant difficulties, which we consider worthy of specific mention:

- the Loans and advances to customers data tape (hereinafter "Loan Tape") had a number of empty fields and erroneous content;
- the Collateral Database (CDB) presented inconsistencies in the content, and when cross-compared with other information such as the Loan Tape.

While the issues with the Loan Tape have been resolved either, through recurrent interactions with the Bank and the use of assumptions and market comparable data, or their potential impact on the valuation work is not material, the CDB presented significant issues, such as inconsistent aggregated appraisal values and dates among different versions and different appraisal dates among versions. We consider the reliability of the CDB might affect our valuation work on the Loan Portfolio, as our valuation is very sensitive to changes in the CDB. Banco Popular provided the fifth and last version of the CDB on 20 December 2017.

To solve the issues, we initiated a quality check process and alerted the Bank and SRB counterparts about these unexpected problems. Consequently, we have performed several data quality checks on the CDB (5 versions), identifying still a number of material issues. We shared the results of the quality check with Banco Popular, and it was confirmed that there might be collateral value positions with potential issues, potential duplicates of collateral values, potential faulty currency reporting, and incorrect distribution of collateral values among different assets in the same Real Estate development. We consider that these issues are likely to overestimate the amount of available collateral and hence would not affect our overall conclusion that Affected Creditors and Shareholders would have achieved no recoveries in insolvency.

1.4. Methodological approach taken

In considering the basis for our valuation work, we have had regard to the requirements of DR (EU) 2018/344 and the SRMR.

As required, we have considered the insolvency scenario of Banco Popular on a legal entity basis, reflecting the process, which would apply under the Spanish Insolvency Act.

We consider that a liquidation would be the appropriate process and that a going concern sale of the Bank's business would not be possible; accordingly the process would be for the disposal of assets on a portfolio basis or piecemeal. We summarise the rationale for this in section 2.1. Legal Framework for Insolvency.

Given the financial and operational interconnectedness between Banco Popular and its subsidiaries, a liquidation appointment at the parent would have broader consequences for the Group including that certain of the Bank's subsidiaries may also enter liquidation. We discuss this in section 3.1. Impact of Banco Popular liquidation on the rest of the Group.

Taking the above into account, we have considered the liquidators' approach to maximising the value of the assets and distributing realisations to creditors. For each asset class, we have applied specific assumptions on our valuation methodologies to estimate the recovery value (in cash terms) based on the liquidators' anticipated realisation strategy as described further in section 3.2.

We have considered the costs which could arise in the liquidation process and which would reduce net recoveries to creditors (i.e. liquidation fees, employee costs, operating costs and potential contract termination costs) – see section 3.3. Liquidation costs.

We have also considered the potential additional claims which are not reflected in the entity balance sheet but could arise in the insolvency proceeding which would dilute available net realisations to existing creditors (i.e. legal contingencies – see section 4.9.).

Where non-essential information required for our work was not available, we built hypotheses and assumptions from detailed analysis, sampling, market benchmark data or other available sources.

In formulating our methodological approach, we have taken into account the requirements of Article 4 of the DR 2018/344 - *Determination of the treatment of shareholders and creditors under normal insolvency proceedings*. Specifically we have considered the expected cash flows arising from asset realisations and costs, on an undiscounted basis, during the liquidation period based on our envisaged liquidation scenario. We should point out that considering that repayment dates to creditors do not necessarily concur with asset realisation dates, as the former depends on the liquidator's approval and experience shows that there could be material time lapse in between, recovery values for the different liquidation scenarios have not been discounted to consider the time value of money. Nonetheless, should recoveries amounts be discounted as of the date of resolution, this would result in lower amounts than the ones showed in the Report.

Finally, we flow these through the waterfall of creditor claims, using the hierarchy set out in the Spanish Insolvency Act. The resulting cash flows to Affected Shareholders and Creditors may then be compared, after discounting for timing of receipt, to their treatment in resolution.

1.5. Banco Popular Balance Sheet as at the Valuation Date

Our work is based on the Bank's balance sheet as at close of business on 6 June 2017 as provided to us by the management of the Bank.

6 June 2017; Cm	Balance	NBV Intra group ⁽¹⁾	Chapter of the Report of the (NBV amount)
Cash and cash balances at central banks	1,334	-	-
Financial assets held for trading	2,039	66	4.6 Equity and Fixed Income 4.7 Derivatives
Financial assets designated at fair value through profit or loss	-	-	4.6 Equity and Fixed Income
Available-for-sale financial assets	10,694	134	4.6 Equity and Fixed Income
Loans and receivables	83,330	6,585	4.1 Loans 4.6 Equity and Fixed Income
Held-to-maturity investments	6,997	-	4.6 Equity and Fixed Income
Derivatives - Hedge accounting	218	8	4.7 Derivatives
Fair value changes of the hedged items in portfolio hedge of interest rate risk	261	-	-
Investments in subsidiaries, joint ventures and associates	9,908	-	4.4 Joint Ventures, Associates and subsidiaries
Tangible assets	774	-	4.2 Real Estate assets
Intangible assets	1,198	-	4.5 Intangible
Tax assets	5,692	-	4.3 Tax assets
Other assets	1,045	17	-
Non-current assets and disposal groups classified as held for sale	2,954	-	4.2 Real Estate assets
TOTAL ASSETS	126,443	6,811	

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6 June 2017; €m	Balance	NBV Intra-group ⁽¹⁾	Chapter of the Report (NBV amount)
Financial liabilities held for trading	1,562	22	
Financial liabilities designated at fair value through profit or loss	-	-	
Financial liabilities measured at amortised cost	113,169	8,596	
Derivatives - Hedge accounting	866	10	
Liabilities under insurance and reinsurance contracts	-	-	
Provisions	747	-	
Tax liabilities	232	-	
Share capital repayable on demand	-	-	
Other liabilities	469	5	
Liabilities included in disposal groups classified as held for sale	-	-	
Net intersegments financing	-	-	
TOTAL LIABILITIES	117,045	8,633	
Capital, reserves and retained earnings	9,659	-	
Accumulated other comprehensive income	(262)	-	
TOTAL EQUITY	9,398	-	
TOTAL EQUITY AND LIABILITIES	126,443	8,633⁽¹⁾	

(1) Recovery of these intra-group positions is detailed in section 5

(2) €20.5m of non reconciled difference with LDT report in section 6

Source: Banco Popular's Individual Financial Statements and intra-group data tape

1.6. Scope of the Report

As noted above, an independent valuer is required to assess the treatment that shareholders and creditors in respect of which resolution actions have been affected, or the relevant deposit guarantee scheme, would have received had the entity entered into normal insolvency proceedings at the resolution decision date.

For the purpose of the Report, these are considered holders of Ordinary Shares in the Bank (€2,098,429,046), holders of Additional Tier 1 capital instruments (€1,346,542,000), holders of Tier 2 capital instruments (€684,024,000). All of them constitute instruments that were written down and transferred to the purchaser, as set out in both the SRB's Resolution Decision dated 7 June 2017 and the FROB's Implementing Act/Decision adopted by its Governing Committee on 7 June 2017. The Deposit Guarantee Scheme was not used in the resolution and hence is not included in the definition of Affected Shareholders and Creditors.

2. Insolvency scenario

As set out above, following the FOLTF decision and revocation of the banking licence, we consider that, consistent with previous Spanish bank insolvency cases¹⁴, liquidation would be the sole option for an insolvency scenario of a financial institution.

Once the liquidation phase starts, the Court will appoint a liquidator, whose main function is to collect in the assets of the entity, realise them and distribute the proceeds to creditors, according to the legally prescribed hierarchy. This should be completed as quickly and efficiently as possible, taking into account the required Court processes, and in particular the nature of insolvency proceedings, which are likely to impact on overall speed and efficiency.

Further commentary on this is provided in section 2.4.3.

Determining the overall strategy that a liquidator is likely to apply to recover value from the Bank's assets to distribute to creditors is fundamental to the analysis.

Given this is a hypothetical situation with no precedent in the Spanish market for a bank of the size and complexity of Banco Popular, this is inevitably highly subjective and requires the exercise of professional judgement based in our expertise in the following areas, amongst others:

- Liquidation scenario including time horizon;
- Impact of the insolvency of the Bank on the rest of their Group;
- Strategy for the realisation of assets, including the liquidator's risk appetite;
- Liquidation costs;
- Macroeconomic expectations;
- Possible legal uncertainties that have not previously been tested in the Courts;
- Impact of the Bank's failure on the broader economy.

It is worth noting that the Spanish Insolvency Law was not designed for insolvency proceedings of entities of the size and complexity of Banco Popular. In such cases, and following previous examples in Spain, a change in the law may be required to meet the needs of the specific proceedings; however we consider that such subjective analysis is outside the scope of the required analysis.

2.1. Legal framework for insolvency

Spain has no specific law for the liquidation of a financial institution. Therefore, the liquidation process would be the same as for any non-financial company subject to certain aspects of insolvency proceedings for financial institutions including the ranking of creditor claims.

2.1.1. Nature of the insolvency process – creditor agreement or liquidation

The Spanish Insolvency Act includes, as an alternative to liquidation proceedings, the option of agreeing a creditors' composition to write down or reorder claims and allow the entity to remain in business.

We have concluded for the purposes of the Report that a liquidation of the parent company is the appropriate basis, for three key reasons:

¹⁴ Banco Mediterráneo and Banco Madrid.

- Spanish Law 11/2015 which transposes the BRRD states that a Valuation of difference in treatment should be performed assuming that the entity has entered into a liquidation proceeding¹⁵;
- We do not consider that a creditor agreement would be possible:
 - Given the liquidity position of the Bank on the Resolution Date, and the SSM's FOLTF decision, which meant the Bank could not continue to operate while negotiations were undertaken, leading to significant value destruction ;
- The Bank had unsuccessfully attempted a private sale for several months prior to resolution. In light of the auction outcome, and ongoing capital requirements, it is unlikely that any negotiation with creditors could result in a better outcome for the Affected Shareholders and Creditors than Resolution.
- A banking licence is required to accept customer deposits, which are fundamental to the ongoing operation of the Bank. Under Spanish Law, the bases for revocation include¹⁶:
 - i. Inability to pay funds to depositors or to offer guarantees of being able to fulfil its obligations to creditors;
 - ii. A judicial decision to open a liquidation phase in an insolvency proceeding¹⁷.

Both conditions would be satisfied in the counterfactual scenario envisaged for the purposes of this valuation. This would be consistent with the case of Banco de Madrid, S.A.U. (hereinafter "Banco Madrid").

Moreover, even in the extremely unlikely event of the Bank of Spain not taking action, the risk of a run on deposits created by the FOLTF announcement and SRB's decision to not place the Bank under resolution, would force the Bank's directors to file for liquidation and cease trading.

2.1.2. Banco Popular legal framework as a group

The Group comprises 123 different legal entities¹⁸. Under the Spanish Insolvency Act, the liquidation of a group of companies occurs at a legal entity level¹⁹.

Given the financial and operational interconnectedness between Banco Popular and its subsidiaries, a liquidation appointment at the parent level may also lead to liquidation proceedings at the subsidiary company level.

We have considered the treatment of subsidiaries as this could impact the recoveries for Banco Popular's creditors, increasing them if funds flow up from the subsidiary or diluting them if the Bank is liable for any of the debts of the subsidiary (i.e. under parent company guarantees).

The Bank and the majority of its subsidiaries are located in Spain; accordingly, Spanish law forms the basis of our analysis for these entities.

¹⁵ Article 10.1 of RD 1012/2015.

¹⁶ The other important economic reason is the failure to comply the prudential requirements related to capital, large exposures and liquidity, which are established in the third, fourth and sixth parts of Regulation No. 575/2013.

¹⁷ Article 8 of Law 10/2014.

¹⁸ For the purposes of the Report, we analyse 37 investees, the rest are immaterial in the wider context.

¹⁹ Under the Spanish Insolvency Act, there is only one exception to the liquidation on a legal entity level and it will not be our case. Article 25 bis Spanish Insolvency Act.

Certain subsidiaries are located in other jurisdictions, and are thus regulated under a different legislative framework. Specifically, the Group has a subsidiary in Portugal (Banco Popular Portugal). As detailed in section 3.1., we have concluded that the Bank's insolvency would force the Portuguese entity into liquidation also. This analysis has been carried out according to Portuguese Law regulating insolvency proceedings²⁰ (see Appendix II for more detail).

2.2. Explanation of liquidation scenario and duration

2.2.1. Background of Liquidation

There are several phases to insolvency proceedings under the Spanish Insolvency Act as set out below.

Common Phase:

The insolvency administrator contacts all creditors to prepare a provisional report with a list of creditors and prepares an inventory of assets. Creditors can challenge this and any disputes would need to be resolved by the Court.

Once the Court has resolved all outstanding issues, the insolvency administrator submits a definitive report, and the Court declares the end of the common phase.

One option for the insolvency administrator after the Common Phase would be to propose a creditors' composition; as noted above we do not consider this would be possible.

Liquidation Phase

The liquidation phase will start if (i) no creditors' composition proposal is submitted or approved, (ii) the debtor requests liquidation (as may be the case here) or (iii) there is a declaration of breach of the approved composition.

During this phase, management's powers are suspended.

The insolvency administrator (also named in this phase the "liquidator") submits a liquidation plan that provides the Court with an ordered schedule to dispose of the entity's properties, goods and rights. The liquidation plan²¹ should include all the steps necessary to realise the entity's assets.

The Court will review the liquidation plan, and will either approve it as submitted or will make amendments. Pending approval of the liquidation plan, the liquidator is unable to sell any assets (with certain limited exceptions).

Every three months following the opening of the liquidation phase, the liquidator will submit to the Court a report on the status of the operations, detailing and quantifying the claims against the estate that are pending payment, indicating the maturity dates for liabilities and the dates when the claims pending payment will be paid.

In Banco Popular's case, due to the cessation of the banking activity, a Collective Dismissal Procedure would also be required, since ultimately all of the Bank's employees will be made redundant, this would be dealt by the Insolvency Court. Failing to plan for this properly could have a significant effect as the efficiency of the liquidation procedure may be harmed due to a lack of personnel and information loss.

In addition, as will be explained, if the Court recognises the existence of a Labour Group, all companies with the Group would be responsible for the cost, regardless of which workers

²⁰ Código da Insolvência y da Recuperação de Empresas.

²¹ The Liquidation Plan would be made available at the Court Office. During the following fifteen days, the debtor, the creditors and the representatives of the employees may make remarks or propose amendments.

were dismissed. The impact of the eventual joint liability of the Group would be paid as a credit against the estate, and would not have a material impact on the waterfall of creditors not affecting the outcome for Affected Shareholders and Creditors.

A key effect of liquidation under Spanish Insolvency law is the suspension of further accrual of interest on creditor claims, with the exception of pledge claims²².

2.2.2. Duration of the liquidation proceedings

In developing the liquidation scenario, we have considered the period allowed to the liquidator to sell the assets, since this is fundamental to estimate the amount that he is able to realise for the benefit of creditors.

Recent changes to the Spanish regulatory framework designed to accelerate the liquidation process, have established a one-year period for this phase of the process. After this, any relevant party can request the Court that the liquidator should be removed and that a new one is appointed²³. In this regard, the Spanish Insolvency Act establishes the undue prolongation of the liquidation phase as a reason to replace the liquidator. In addition, the liquidator could be forced to return any remuneration received since the opening of the liquidation phase²⁴.

However, given the complexity of the hypothetical liquidation proceeding, we have included consideration of a longer period as alternative scenarios to finalise Banco Popular's liquidation.

In particular, for any large insolvency proceeding such as Banco Popular's, a very quick process will lead to market capacity issues, distressed prices and low realisations whereas a longer process would allow a more orderly work out of the Bank's assets, the most significant of which is its loan portfolio.

For the purpose of the Report, we have assessed three scenarios. For each of these we analyse the treatment that Affected Shareholders and Creditors of Banco Popular would have received under a liquidation proceeding.

- 18-month scenario: We have considered a first scenario of 18 months. As part of the changes noted above, a liquidator is only remunerated for 12 months. This remuneration period may be extended to an additional 6 months (two extensions of 3 months) for complex processes as agreed by the Court²⁵.
- 3-year scenario: From an operational point of view and given the size of both the asset portfolio and the Bank's operations, this is estimated to be the minimum period for the wind-down and realisation of assets. In addition, we note that a reasonable portion (>50% of the total) of the Bank's loan portfolio should naturally amortise during this period.
- 7-year scenario: Assuming that the liquidator could continue running the liquidation process for seven years, this may generate enhanced recoveries through a more orderly disposal and work out of assets. In particular, we note that a sufficiently large portion of the Bank's loan portfolio (~75% of the total) should naturally amortise during this period.

When realising assets, Spanish Insolvency Act requires the liquidator to act in a diligent fashion to obtain the best value in the circumstances; however, he is not required to

²² Art. 59 of the Spanish Insolvency Act.

²³ Article 153 Spanish Insolvency Act.

²⁴ Article 153 of Spanish Insolvency Act establishes a liability regimen for the liquidator in case of prolongation of the liquidation phase without due cause.

²⁵ Transitory Provision Third of Law 25/2015.

speculate on uncertain outcomes. Moreover he needs to take account of creditor wishes to receive repayment of amounts due in a reasonable period.

In terms of how different stakeholders assess the liquidation plan, the fact that post liquidation interest is suspended may be important if higher ranked creditors consider that they are unlikely to be compensated for delays in repayment of amounts due; equally suspension of interest could be of benefit to creditors lower down the creditor waterfall.

Against this background, we consider it would be unreasonable to require creditors to wait longer than 7 years for the liquidation to complete.

2.2.3. Role and purpose of liquidator

The liquidator's ultimate objective is to carry out the asset realisation in a reasonable period²⁶.

According to the Spanish Insolvency Act, once appointed, the main responsibilities of the liquidator are the following:

- **Replacing the Board of Directors** (in the liquidation phase). The liquidator will assume management functions in the company. The liquidator will be liable for damages and losses caused to the assets by his acts and omissions²⁷. The liquidator may ask the Court for the termination of directors' contracts.
- **Powers in employment matters**. The liquidator may ask for the modification of certain employment conditions and for a collective dismissal or suspension of employment contracts.
- **Submit the liquidation plan** to the Court on how they intend to dispose the assets and define the liquidation strategy. The liquidator will evaluate each asset and set the priority of payments²⁸.
- **Submit a quarterly report** to update the Court and creditors regarding the status of liquidation.
- **Realise the assets** according to the Liquidation plan and thereafter to **distribute the proceeds to creditors** according to the prescribed hierarchy.

2.3. Comparison to other failed bank cases

We have considered whether other European liquidation cases could provide insight into the hypothetical liquidation scenario for Banco Popular and, given that insolvency proceedings are governed by national Law, have taken into account the Banco Madrid case, which started its liquidation proceeding under the Spanish Insolvency Act and is the most recent Spanish bank insolvency opened to date. The FROB considered that the public interest conditions justifying resolution action were not met and decided thus not to open the resolution process. However, this case differs fundamentally to Banco Popular in terms of its systemic impact. Banco Madrid had €1,349m of total assets on 31 January 2015, €609.2m of deposits and only €150m of customer loans. Moreover, we note that its liquidation pre-dates certain important legal changes in Spanish Insolvency Act, which will impact on the Banco Popular scenario. Nevertheless, we consider this a useful precedent in terms of:

²⁶ Art. 33.1.f) of the Spanish Insolvency Act.

²⁷ Art.36.2 of the Spanish Insolvency Act.

²⁸ The rules about the creditor hierarchy is stated in accordance to the BRRD and the Spanish Insolvency Act. Despite this, the insolvency administrator may alter that rule when they consider it convenient to the interest of the insolvency proceeding and whenever it is assumed that the aggregate assets are sufficient to settle all the claims against the estate.

- i. Confirmation of the banking licence revocation; and
- ii. Valuation of certain assets in liquidation.

2.4. Macroeconomic context for the liquidation

We have considered the macroeconomic context (as anticipated at the Valuation Date) in framing the liquidation scenario (for example, in the choice of appropriate benchmarks for loan PDs and LGDs and realisable values for real estate collaterals).

During the first months of 2017, before the hypothetical Resolution Date, the Spanish economy continued to grow faster than the Eurozone area average and with a more balanced growth pattern than in the pre-crisis years, reflecting a strong contribution of net exports and healthy domestic demand.

Private consumption remained as the main driver of growth, mainly thanks to temporary factors such as oil prices decline, low interest rates and an undervalued euro, while investment rebounded in the first half of 2017. Finally, hard and soft labour indicators suggested a strong job creation from January to June 2017, allowing for further reduction in the unemployment rate.

As a reference point for expectations as of the resolution date of macroeconomic conditions in the years during which the liquidation for Banco Popular would occur, we have relied on the spring 2017 Economic Forecast by the European Commission.

The Spanish economy was forecast to continue to grow at 2,8% in 2017²⁹, 0,4p.p. below the growth level in 2016 but in line with the previous three years and this trend was expected to continue beyond 2018 at a more moderate rate (2.4% at 2018 and 2.1% at 2019)³⁰, reflecting:

- Private consumption growth was forecast to slow reflecting a moderation in domestic consumption, with household savings rates already at historical lows and a flat labour market. Other factors that supported the growth of household consumption in recent years, such as low interest rate (expansive European monetary policy), were expected to decrease; and higher oil prices and euro appreciation could impact disposable income.
- Residential construction was also expected to moderate in the next few years, after a strong rebound and a slowdown in household incomes.
- Equipment investment growth was forecast to ease gradually in line with the projected slowdown in final demand.
- Exports were forecast to continue growing dynamically but at slightly lower rates as gains in export market shares should also reduce.

Headline inflation was forecast to increase again in the first half of 2018, mainly due to the increase of oil prices, reaching an annual average of 1.4% in 2018 (still below the ECB's threshold for price stability). Core inflation was forecast to recover gradually over the forecast horizon as wages pick up and the output gap turns firmly positive.

The improvements in the financial markets, together with a stronger demand, had resulted in a recovery of credit demand but credit growth was still negative. According to Bank of Spain data on banking lending to the private sector, the credit in June 2017 reduced 3.0% annually. The European Commission expected this trend to continue in the next few years as the Spanish economy delevers. This outlook of high debt, low inflation, moderation in private demand and the recovery of credit supply by banks, would keep downward pressure on interest rates.

²⁹ Spring 2017 Economic Forecast by European Commission.

The above context of recovery and solid growth of the Spanish economy is the one used as a base scenario for our liquidation exercise. However, it is important to note that this is a conservative scenario that generally would work in favour of Banco Popular's Affected Shareholders and Creditors.

Nonetheless, the liquidation of one of the main national banks, the sixth according to volume of assets, would have an impact on the rest of the financial sector, mainly on those entities with liquidity and solvency problems. The increase in risk premiums due to the greater uncertainty could lead to new cases of liquidation due to illiquidity, creating a vicious circle for the Spanish financial sector, which may result in additional bank failures or liquidations.

Furthermore, greater banking uncertainty would normally have a direct impact on the Spanish economy. Banking difficulties would result in greater credit restrictions, affecting the investment of companies and households' consumption. In addition, economic uncertainty would be transferred to households and companies' expectations, affecting the number of employees hired by companies and the willingness to purchase across families, which would enlarge the problem.

The above would present a negative context that would most certainly reduce the recoveries of Banco Popular's debtors and creditors and increase even further the losses in an insolvency scenario.

3. Liquidation Strategy

In this section, we set out our views on the potential strategy which the liquidator would adopt to realise assets and get funds back to creditors taking into account:

- i. Group structure and impact of the Bank's insolvency on its subsidiaries and investments
- ii. Asset realisation strategy
- iii. Liquidation costs
- iv. Creditor Hierarchy

3.1. Impact of Banco Popular liquidation on the rest of the group

We have considered the impact on, and realisation strategy, for other entities within the Group (Investees companies) in order to estimate potential recoveries during a liquidation which could flow to Banco Popular creditors. The Group is formed by 123 legal entities, out of which, Banco Popular has a direct stake in 79.

It is possible to distinguish two potential effects of Banco Popular's liquidation on Investees:

- i) The Investee is not affected by Banco Popular's liquidation (or the impact is minor); therefore, the Investee company can continue to operate and be sold as a going concern; or
- ii) The impact on the Investee is significant and the Investee cannot continue to operate. In this case, and given there is a cessation of activity, the entity would inevitably enter into an insolvency proceeding directly under the liquidation phase.
 1. **Liquidity issues:** Banco Popular's liquidation generates a funding problem for the Investee, which cannot be addressed in financial markets, so the Investee also enters an insolvency process (e.g. this would be the case for one of the main investees, Banco Popular Portugal³⁰).
 2. **Impaired Assets:** intra-group liabilities are deeply subordinated under Spanish Insolvency Act (just above equity; see more details under 3.4.). Therefore, after Banco Popular's liquidation, all Investees' rights against Banco Popular will be impaired and certain Investees may be forced to enter into a liquidation proceeding (e.g. Banco Pastor and Banca Privada).

The following could create a contagion effect within the Group, forcing the insolvency of other Investees.

Taking into account the above, an analysis exercise was carried out to study the impact of Banco Popular's liquidation on its Investees, to identify if these might be forced to enter in a liquidation process or could continue to operate.

For those Investees that have not been affected by Banco Popular's liquidation, we have estimated the potential equity and other assets recoverability for Banco Popular. In the case of investees with assets greater than €1bn, a detailed liquidation exercise has been carried out to determine the value of recoverability of Banco Popular's assets in these

³⁰ In the case of Banco Popular Portugal, we consider its liquidation would quickly follow because of illiquidity, and the likely withdrawal of funding lines previously provided by its parent company, Banco Popular (€2,161m in loans from Banco Popular to Portugal) as at 6 June 2017. We anticipate Banco Popular Portugal would be unable to replace this in the markets against a backdrop of high risk and uncertainty (potential exit of deposits because of the same happening to the parent company, and new provisions because of the impairments of its assets with Banco Popular and its subsidiaries).

investees. According to these criteria, a detailed liquidation exercise has been performed for the following investees:

1. Banco Pastor (Spanish Retail Bank).
2. Popular Banca Privada (Spanish Private banking).
3. Banco Popular Portugal (Portuguese Retail Bank).

For the rest of Investees assumed to enter into liquidation together with Banco Popular and whose assets are lower than €1bn, we have considered that the value recoverability of Banco Popular's assets in these investees is not material.

In the case of securitisation vehicles, we reviewed the associated issuing prospectuses to confirm treatment in the event of the insolvency of the transferring entity (Banco Popular). Based on these prospectuses, securities and notes issued through securitisation vehicles have security over the specific transferred assets and the managing companies of the vehicles could request that such assets are treated differently in the balance sheet of Banco Popular during the liquidation process. In the recent case of Banco Madrid, the insolvency administrator considered that these pledged assets have to be treated independently of the rest of the entity's assets with the aim to pay down the debt with these assets as collateral.

In the event of over-collateralisation, excess recoveries would be transferred back to Banco Popular who retained the equity tranche. We therefore separately considered the likely recoveries on the encumbered assets and confirmed that in all three scenarios (18M, 3Y & 7Y), the realisation from the specific assets would cover the issued debt. This was on the same basis as the liquidation, assuming that customer behaviour would be similar given the same reduction in capabilities of the bank; impact on likely servicing quality; and ability to move to alternative providers.

As a result, for the purposes of the Report we have included the loan realisations in the securitisation vehicles and treated the creditors as secured creditors of the bank as this is consistent with the on balance sheet treatment, and given the over collateralisation there is no impact on the overall result.

3.2. Asset realisation strategy

As noted above, we have assumed that Banco Popular's banking licence is revoked with the declaration of insolvency and that the liquidation would proceed on the basis of a disposal of the entity's assets either in portfolios or piecemeal. We summarise below our assumptions for realisation strategies and the valuation approach.

Asset class	NBV at 6 June 2017 (€m)	Comments	Asset realisation strategy	Valuation approach
Cash and cash balances at central banks	1,334	100% liquid asset	Collect in immediately following liquidation	Based on NBV
Loan portfolio ³¹	83,330		<p><i>Performing loans</i> portfolio (PLs) will be run-off until the end of the liquidation period, taking into account their yield, a significant increase of the prepayment rate and new delinquencies, followed by a final sale of the remaining book.</p> <p><i>Non-performing loans</i> will be sold shortly after liquidation and new non-performing loans will be sold during the liquidation proceeding</p> <p>Of which €48,178m (57.8% of credit portfolio) are encumbered assets</p>	<p>For PL's – undiscounted gross value of anticipated amortisations during the liquidation period plus interest received, DCF approach for the remaining book at the end of the liquidation period, applying an investor discount rate according to market standards.</p> <p>For NPL's – market value approach</p>

³¹ Including €654m of fixed income

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Asset class	NBV at 6 June 2017 (€m)	Comments	Asset realisation strategy	Valuation approach
		<p>Comprises:</p> <ul style="list-style-type: none"> • Own use assets used in the business (including furniture) • Non-current assets and disposal groups classified as held for sale • Inventories (other assets) • Investment properties 	<p>For the tangible assets and non-current assets portfolio, a sale of asset portfolios phased over the liquidation period with prices estimated based on market demand in the Spanish real estate context.</p> <p>This would be phased for assets used in the business during the liquidation period (head office, certain branches, etc.)</p>	<p>We have followed a top-down approach and a bottom-up challenge based on a statistical model developed by Deloitte. This methodology adjusts the last appraisal value provided of each asset considering its location, typology, status, and other macroeconomic inputs.</p> <p>The portfolio has been sampled considering the cases with the highest Gross Book Value (GBV), including representative examples of each geographic location and asset typology. Aiming to challenge the outcome from the top down-approach, the selected sample was valued on market terms according to the International Valuation Standards for Real Estate properties.</p> <p>Finally, inventories and headquarters have been valued under a market approach according to International Valuation Standards for Real Estate properties.</p>
Real Estate Assets	3,728			

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Asset class	NBV at 6 June 2017 (€m)	Comments	Asset realisation strategy	Valuation approach
Tax assets	5,692	Comprises protected and non-protected DTA's as well as current tax assets	<p>The CTAs refund could be requested through the submission of the 2017 Corporate Income Tax Return (to be filed in 2018).</p> <p>Protected DTAs might be realised requesting the conversion into a credit receivable against the Spanish Tax Authorities, through the submission of the 2017 Corporate Income Tax Return (to be filed in 2018).</p> <p>Non-protected DTAs. No realisation is expected (other than to the extent to set off against the DTLs).</p> <p>The Spanish Tax Authorities has a general 6-months deadline from the date when the request is submitted, for the refund of the CTAs and the Protected DTAs. Nevertheless, in some cases the refund/payment is carried out later.</p> <p>The legislation establishes a 4-years statute of limitations period for reviewing the Corporate Income Tax returns where the tax assets conversion/refund is declared.</p> <p>Therefore, in practice, the recoverability/payment could take more than 6 months.</p>	<p>The realisable value in liquidation depends on the recoverability of tax assets according to the Spanish Tax Legislation.</p> <ul style="list-style-type: none"> • CTA have been valued at book value. • DTA: <ul style="list-style-type: none"> - Protected DTAs could be converted into a credit receivable against the Spanish Tax Authorities in a liquidation procedure and valued at book value. - Non-protected DTAs - No realisation is expected (other than to the extent to set off against the DTLs).

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Asset class	NBV at 6 June 2017 (Cm)	Comments	Asset realisation strategy	Valuation approach
Joint Ventures, Associates and Subsidiaries	9,908	<p>Banco Popular has shares in 79 companies - deposit taking entities, non-financial companies, multi-group corporations- of which 38 might continue to operate and 41 will enter into liquidation after Banco Popular's liquidation</p>	<p>All Investees are assumed to be sold during the first 18 months of the liquidation process.</p>	<p>Will depend on the impact of Banco Popular's liquidation.</p> <ul style="list-style-type: none"> Investees able to continue as Going Concerns: valued through multiples derived from market prices, put/call option prices, adjusted book value, third party valuation reports, offers / prices from other transactions and offers or price indications received Investees put into a liquidation process: We have considered all material subsidiaries (assets > €1bn) (namely: Banco Pastor, Popular Banca Privada and Banco Popular Portugal) and estimated realisations in liquidation and the amount which could flow to the Parent
Intangible assets	1,198	<p>Banco Popular's intangible assets comprise goodwill and other intangible assets, mainly, computer software, customer relationships and trademarks.</p>	<p>Considering a liquidation scenario of the Bank, we consider that no value could be recovered from intangible assets, or alternatively that any realisations would be very small.</p>	<p>We consider that no value could be realised from this asset class or that any realisations would be minimal.</p>

Valuation of difference in treatment - Banco Popular Español

Asset class	NBV at 6 June 2017 (€m)	Comments	Asset realisation strategy	Valuation approach
Equity, Income derivatives ³²	Fixed and 20,863	<p>Comprises:</p> <ul style="list-style-type: none"> • Financial assets held for trading • Available-for-sale financial assets • Loans and receivables – Fixed Income • Held-to-maturity investments • Derivatives-hedge accounting • Fair value changes of portfolio hedge of interest risk 	<p>Taking into account market liquidity, the majority of assets included in these financial portfolios might be realised within the first few months of the commencement of the liquidation following approval of the liquidation plan.</p> <p>In the held for trading portfolio, there are €321m pledged assets.</p> <p>In the available for sale financial assets portfolio, there are €10,694m pledged assets.</p> <p>In the held to maturity investment portfolio, there are €5,535m pledged assets.</p>	<p>NBV reflects Fair Value in: (i) financial assets held for trading, (ii) available-for-sale financial assets and (iii) derivative assets.</p> <p>For the purposes of Valuation of difference in treatment, level 1 assets would be valued at bid price based on market observations (as of Valuation Date). The valuation of assets classified as level 3 (assets whose fair value cannot be directly obtained from financial markets), will be carried out using the methodologies that constitute in all cases an accepted market approach.</p>
Other assets	1,145	-	<p>We have analysed each type of asset in this category according to its nature and recoverability</p>	<p>€420.4m corresponds to a reconciling error. We have netted assets and liabilities (localized in financial institution deposits) for this amount.</p> <p>For other operations not reconciliated correctly, assets and liabilities have been netted correctly for an amount of €282.3m.</p> <p>Regarding other assets, a recovery value of €166m has been estimated, of which €9m are from intra group positions.</p>

³² Excluding JVs, subsidiaries and associates, cash and cash from Central Banks of €1,334m

3.3. Liquidation costs

We have considered the following main costs that are likely to arise in the liquidation.

3.3.1. Remuneration costs

Remuneration costs include the remuneration received by the liquidator, the Bank's lawyer for the purposes of the insolvency proceedings and the "procurador" (legal representative in the court).

It should be noted that the final remuneration will be agreed by the Court and will depend on various aspects such as the complexity of the insolvency proceeding.

3.3.1.a) Liquidator's remuneration

The Spanish Insolvency Act³³ establishes the basis of the liquidator's remuneration indicating that its calculation should be established by a special regulation that has not yet been developed.

We consider that, until the referred standard is developed, the RD 1860/2004 and the Spanish Law 25/2015 will continue to be applied for the calculation of the liquidator's remuneration. This standard includes a cap to the remuneration that a liquidator might receive under the common phase.

Under this phase, the liquidator's remuneration will be the lower of the following two amounts:

- A.** The amount resulting from multiplying the debtor's assets by a factor of 4%.
- B.** One million five hundred thousand euros (€1.5m).

The same article sets out that the Court may approve a higher remuneration for complex insolvency proceedings. However, if the Court approves a remuneration increase, this cannot exceed 50% of the above amounts. As this regulatory change is very recent, there are no comparable cases that we could have used as a precedent to understand how this change would be implemented in practice.

The goal of the several reforms carried out by the Spanish Insolvency Act³⁴ intended to regulate insolvency proceedings that are less complex than would be the case for the Bank. In this regard, when the legislator introduced those limits, they may not have considered the liquidation of an entity with the complexity and size of Banco Popular.

For this reason, due to the asset volume of Banco Popular and the complexity of its business and Group structure, we assume that the referred limit and its extension should not be applied. We understand that the judge would reasonably approve a higher remuneration exceeding the limit set out in the Law (including the 50% increase).

Moreover, under Spanish Insolvency Act, a liquidator will be remunerated, additionally to the applicable amount that it will receive under the common phase (which outcome is set out in section 4.8.), for its work during the 18-month liquidation scenario. The latter is calculated according to RD 1860/2004³⁵ on the basis of the 10% of the remuneration received under the common phase for the first six months of the liquidation proceeding plus a 5% of this same common phase remuneration for the following 12 months of the liquidation proceeding.

³³ Article 34 of the Spanish Insolvency Act.

³⁴ Article 34 of the Spanish Insolvency Act.

³⁵ Article 9 of RD 1860/2004.

Furthermore, the Spanish Insolvency Act allows for the appointment of an additional liquidator for complex cases, with corresponding increase in the cap. For Banco Popular's case, we consider that the Court would agree the appointment of two liquidators (the maximum permitted by Law³⁶).

Consequently, the final remuneration, calculated without the aforementioned cap, would have to be multiplied by two.

3.3.1.b) Lawyer's remuneration

The lawyer's remuneration is calculated using a scale from the guidelines approved by the Lawyers' Bar association. This scale is defined based on the total volume of the debtor's liabilities. In this regard, the rules to be applied are those set out in the Madrid Lawyers' Bar association³⁷.

3.3.1.c) Procurador's remuneration

The procurador's fees are calculated based on a scale³⁸ reflecting the total value of the debtor's liabilities included in the insolvency administrator's report³⁹. These fees would need to be negotiated between the procurador and the debtor.

In insolvency proceedings where the debtor has more than 300 creditors, this scale is applied at a rate of 70% of the debtor's liabilities. The total amount that a procurador might receive cannot exceed €300k⁴⁰.

3.3.2. Costs arising from the termination of contracts

Banco Popular was party to a large number of different contractual arrangements, including lease and rental agreements, senior management contracts, etc. As a result of its liquidation, these will no longer be required and Banco Popular will have to bear the costs of termination/ resolution. Termination may be phased over the duration of the liquidation, dependent on need. In this regard, as the closure of branches will take place at different points in time, the termination of each of the lease contracts will depend on when each branch is closed.

Spanish Insolvency Act does not include any reference to the consequences of the termination of contracts during the liquidation⁴¹. As a general rule, where termination results from the cessation of business, the parties usually negotiate by mutual agreement, avoiding protracted litigation.

Nevertheless, in the event that the parties do not reach an agreement, a plea would be filed and the court will determine the penalty.

3.3.3. Employee cost (employee termination costs and personnel costs)

We have considered the strategy for employees in the event of a liquidation of Banco Popular – there were 9,222 employees employed in Banco Popular as of 6 June 2017.

As the Bank would no longer be accepting deposits or undertake new business activity, a significant number of these employees would not be required for the

³⁶ Article 27 of the Spanish Insolvency Act.

³⁷ According to rule 26, the attorney's fees will be calculated with the scale laid down in the Standard Rules based on the final liabilities amount of the insolvency proceeding.

³⁸ Articles 18 to 21 of RD 1373/2003.

³⁹ Article 18 of RD 1373/2003.

⁴⁰ Sole Additional Provision of RD 5/2010.

⁴¹ According to Article 147 of Spanish Insolvency Act, during the liquidation phase, the rules set forth in Title III (Articles 61 and 62) shall continue to apply in all aspects not contrary to the specific provisions of the liquidation.

liquidation process. We summarise below the key issues under Spanish labour law for collective dismissals.

Process for collective dismissal - Spain

Affected employees have the right to compensation in the event of implementation of a collective dismissal procedure for the entire workforce.

In a liquidation scenario, employees will be entitled to the following Claims against the Estate:

- Unpaid salary for the last 30 days of effective work prior to the opening of the insolvency proceeding, not exceeding the double of the minimum inter-professional salary;
- Salaries accrued during the consultation process and until the Court approves the extinctive collective dismissal procedure⁴²;
- Compensation under collective dismissal procedure regulations and under an *Objective Cause* equal to 20-days' salary per year of service, up to a maximum of 12-months' salary.

The *Extinctive* collective dismissal procedure would be a previously agreed process (which would need to be negotiated immediately following the Bank entering into liquidation) applying the timeframe established by regulation.

We note that some employees will be required during the liquidation process to assist with the wind down of the business and realisation of assets. These employees will be dismissed as the liquidation progresses. In this regard, the *Extinctive* collective dismissal procedure will affect employees in a phased manner.

Moreover, we also note that it may be necessary to pay incentives to staff who remain during the liquidation process to counter potential morale issues.

Additionally, it is likely that Banco Popular and its affiliates will be considered as a "Labour Group". If the Court recognises the existence of a Labour Group, all companies with the Group would be responsible for the cost, regardless of which workers were dismissed. The impact of the eventual joint liability of the Bank would be paid as a credit against the estate, would not have a material impact in the waterfall of creditors and would not affect the outcome for Affected Shareholders and Creditors.

3.3.4. Operating costs

We consider that during the liquidation, a number of branches and the head office will remain opened to deal with the realisation of assets (including ongoing servicing of the loans portfolio), claims and other liquidation procedures. These actions will generate costs related to rent, communications, maintenance of premises' equipment and other operating costs. Our assumptions for liquidation costs are outlined in chapter 4 below.

Differences in operating costs are only applicable between scenarios (18 months, 3 years and 7 years).

3.4. Creditor hierarchy

The proceeds of realisation of assets will be applied according to the hierarchy specified under the relevant national insolvency act. We have considered the existing

⁴² Article 64 of Spanish Insolvency Act and Article 51 of RLD 2/2015.

European and Spanish legal framework, together with legal literature identified further in the Report⁴³.

This is summarised in the table, with further details in the narrative below:

Creditor Hierarchy (€bn)

Banco Popular Creditor Hierarchy	
Covered creditor	49.9
Claims against the estate	1.0 / 1.1 / 1.2 ¹
General privileged creditor	33.1
Unsecured creditors	24.3 / 26.0 ²
Including legal contingencies	+1.8 / 3.4 ²
Subordinated claims	10.8

(1) 18 M / 3 Y / 7 Y respective
 (2) Best and worst case respectively
 Source: Banco Popular Individual Financial Statements, Deloitte analysis

Covered creditor (pledge claims)

Pledge claims are paid out of the proceeds of realisation of the related collateral. Consequently, secured assets will not be used to pay other liabilities until the secured (preferential) claim is paid out in full including any related interest.⁴⁴

Debt secured by collateral, is also included in the covered creditors, such as repos, covered bonds and other structured finance instruments (ABS) issued by the Bank and collateralised by residential mortgages, consumer loans, SMEs loans. In all of these cases, these debts will be secured up to the limit of the claim to the pledge creditor.

Where the creditor is the Bank of Spain, ECB or other Central Bank⁴⁵, €26,7bn of the €49.9bn noted above, the pledge creditor may issue a certificate attesting the amounts due and then (themselves) take steps to immediately realise the relevant collateral to satisfy the debt⁴⁶. This allows the relevant creditor to effect immediate execution of the financial guarantee without any delay arising from the opening of the insolvency proceeding⁴⁷.

As noted above, interest continues to accrue on pledge claims, as an exception to the suspension of interest rule post liquidation.

Claims against the estate

Any liability arising after the opening of the insolvency proceeding will be considered a claim against the estate. In the case of liquidation proceedings, these are paid in priority to other liabilities and include:

- i. Liquidators' fees and costs
- ii. Employee related costs
- iii. Contract termination costs
- iv. Operating costs

⁴³ Díaz Revorio, Enrique. 2014, "Manual de especialización en Administración Concursal", Madrid: Fe d'erratas, pg. 215.

⁴⁴ Article 154 Spanish Insolvency Act.

⁴⁵ Finally, the formalisation of these guarantees prior to the Insolvency declaration will not be subject to the rules of Reintegration Action.

⁴⁶ Additional Provision Second Spanish Insolvency Act 13/1994.

⁴⁷ Articles 90.3 and 94.5 of Spanish Insolvency Act.

We understand that as at the Resolution Date May salaries had been paid and accordingly for the purposes of this analysis, unpaid salaries from 1 June 2017 to the date of the opening of the insolvency proceeding⁴⁸, will be classified as claims against the estate and would be paid up to the limits noted above⁴⁹.

Claims against the estate arise during the whole process and would need to be paid prior to distributions to creditors. We consider that the liquidator would create a buffer for the payments of these costs. Thereafter, realisations could be distributed to creditors as funds become available according to the creditor hierarchy.

General privileged creditor

Claims with a general preference include the following and are ranked in a hierarchy with item i paid first and item iv paid last on a Pari Passu basis within each sub-class:

- i. Tax and claims of public institutions;
- ii. Deposits guaranteed by the Deposit Guarantee Fund (up to € 100,000)⁵⁰;
- iii. Deposits from households and micro, small and medium enterprises that exceed the guaranteed level as well as the guaranteed deposits constituted through branches outside the EU;
- iv. Pending salaries at the moment of the liquidation opening not classified as claims against the estate with the limit of three times the relevant legal minimum wage⁵¹.

Claims with general preference are paid from unpledged assets, without affecting pledge creditors' collateral.

Unsecured creditors (ordinary claims)

Claims that are not classified as preferential (pledge or general preference) or subordinated will be classed as ordinary claims. In the Banco Popular case, unsecured debt, institutional non covered deposits, legal claims, etc. would be classified as ordinary claims. Any deficiency on pledge claims would also rank as an ordinary claim. All will rank Pari Passu.

Payment of ordinary claims will be made once pledge creditors (up to the lower of the claim or backing collateral), claims against the estate and claims with general preference have been satisfied in full and will rank pari passu.

Subordinated claims

Subordinated claims are subdivided into seven sub-categories. For the purpose of the Report, we consider the below three sub-categories to be the most relevant. Subordinated claims are the last to be paid with payment ranked by the following hierarchy:

1. Claims subordinated by contract (€2.04bn of the €10.8bn noted above)

This category includes AT1 and T2 instruments. In this regard, we have assumed that in an insolvency scenario the instruments with ISINs XS0979444402 and XS1189104356 (those that under certain circumstances would have been converted into equity under the resolution action) would not have converted into equity prior to liquidation.

⁴⁸ Article 84.2.1º of Spanish Insolvency Act.

⁴⁹ RD 742 / 2016.

⁵⁰ Additional Provision Fourteen Law 11/2015.

⁵¹ We have considered these claims not material for the liquidation exercise.

As regards, claims which are contractually subordinated, certain legal literature⁵² argue that it is legally valid for parties to agree to relegate themselves to the lowest level of subordinated if specified in the contract (i.e. the credit would be paid after intra-group debt).

This position is untested in the Courts, but in the specific case of Banco Popular, the following instruments specify in their contracts the relegation of their claims to the lowest level of subordination.

- ISIN DE0009190702: €64.1m
- ISIN DE000A0BDW10: €19.1m
- ISIN XS0288613119: €5.4m
- ISIN XS0225590362: €7.4m

Given the issue is untested, we have not reflected this in our analysis and have instead applied the hierarchy defined under the Spanish Insolvency Act (i.e. these would be above intra-group).

2. Claims constituted by charges or interest rates (€0.1bn of the €10.8bn noted above).

Unpaid pre liquidation interest (including interest to secured creditors not covered by pledge assets) will be paid before intra-group claims. As noted above interest on claims (other than pledge claims) ceases to accrue in the liquidation proceedings.

3. Intra-group claims (€8.6bn of the €10.8bn noted above)

Amounts due to companies within the same group are subordinated to the lowest level of claims (ahead of equity only)⁵³.

One consequence of this may be that intra-group balances due from the Bank to subsidiaries will become uncollectable in the event of the Bank's liquidation which may force the insolvency of the relevant subsidiary.

Once all the aforementioned claims are paid (including subordinated claims), the remaining assets will be distributed to shareholders.

⁵² Díaz Revorio, Enrique. 2014, "Manual de especialización en Administración Concursal", Madrid: Fe d'erratas, pg. 215.

⁵³ Article 42 of Commercial Code.

4. Liquidation Valuation: Analysis of results

4.1. Loans and Receivables assets

As detailed in the table below, the NBV of loans and receivables as at 6 June 2017 was €83.3bn, and comprised the following sub-categories:

Loans and receivables NBV (€m)	
Asset	NBV (6 June 2017)
A. Fixed Income	654
B. Credit Institutions	7,664
C. Loans and advances to customers	75,012
Total loans and receivables	83,330

Source: Banco Popular Individual Financial Statements

- A. Fixed income assets valued at their amortized cost as at the reference date, using the effective interest method (see section 4.6);
- B. Credit Institutions includes:
- Operations with other entities of the Group (€4,081m). We have carried out a significant liquidation exercise for Banco Popular Portugal, Banco Pastor and Popular Banca Privada, concluding that the recovery value for Banco Popular's rights in these financial entities represents between a 31.9% and 40.6% of the NBV, depending on the scenario.
 - Operations with other credit institutions and credit finance companies that are classified as country risk level 1⁵⁴ (€3,583m). These operations do not have appreciable risk and do not require additional adjustments to the NBV as at the Resolution Date⁵⁵;
- C. Loans and advances to customers other than credit institutions and credit finance companies. In this section, we only describe the methodology and results followed for this portfolio. The remainder of this section provides further details of this analysis.

Accounting reconciliation

The Loan Tape has been requested and obtained as of the Valuation Date (1.1.). Additionally, extra-accounting adjustments for loans and receivables have been requested and obtained as of the Valuation Date (1.2.). Finally, we requested and obtained the detail of the intragroup positions as of the Valuation Date (2.). All information has been reconciled to Banco Popular accounting position as of 6 June, observing the following differences:

⁵⁴ This classification has been developed according to Circular 4/2016 of Bank of Spain. However, the update included under points 153 to 163 of IX Annex of Circular 4/2017 of Bank of Spain (released after the Resolution Date) would have not changed our conclusions on the referred classification.

⁵⁵ As it is disposed in the Annex IX of Circular 4/2017 of Bank of Spain.

Valuation of difference in treatment - Banco Popular Español

Loans and receivables NBV (€m)

	Individual Balance Sheet NBV	Data tape provided NBV	Differences
1. Non intra group positions	72,860	72,843	17
1.1 Of which: informed in Loan Tape	n/a	71,061	n/a
1.2 Of which: not informed in Loan Tape	n/a	1,781	n/a
2. Intra group positions	2,152	2,345	(193)
Total	75,012	75,188	(176)

Source: Banco Popular Individual Financial Statements

1. Non intra-group positions (€72,843m), of which:

1.1. €71,061m was detailed in the Loan Tape provided by the Bank. The methodology described in this section applies to this amount.

1.2. €1,781m was omitted in the Loan Tape provided by the Bank. This includes the NBV of the credit positions⁵⁶ not provided in the Loan Tape obtained from the Bank (but included in other data tapes) adjusted by the provisions constituted as of the Valuation Date, but not assigned contractually. Considering the nature of these financial instruments, we have considered that the GBV could be recovered in its entirety.

2. Intra-group positions (€2,345m). This includes the NBV of the intragroup positions informed by Banco Popular at Valuation Date. We have analysed the impact of Banco Popular's liquidation against these counterparties, concluding that 7.6% (worst case) and 10.5% (best case) of its NBV would be recovered (see section 5).

General overview

As at 6 June 2017 Banco Popular's entity loan book was broken down into the following segments:

Loan portfolio credit categories

	# Accounts	GBV (€m)	% over total	NBV (€m)	% over total
Non financial corporations (corporate)	403,440	53,306	67%	45,125	64%
Secured	73,498	24,394	31%	20,213	28%
Unsecured	329,942	28,911	36%	24,912	35%
Lending for home purchase (mortgages)	221,242	20,098	25%	19,817	28%
Secured	220,860	20,094	25%	19,813	28%
Unsecured	382	4	0%	4	0%
Consumer and other household loans	246,199	1,645	2%	1,459	2%
Secured	263	31	0%	30	0%
Unsecured	245,936	1,614	2%	1,429	2%
General Government	301	4,391	6%	4,385	6%
Secured	28	51	0%	51	0%
Unsecured	273	4,340	5%	4,334	6%
No information	36,759	276	0%	276	0%
Secured	2	0	0%	51	0%
Unsecured	36,757	276	0%	276	0%
Total	907,944	79,719	100%	71,062	100%

Source: Banco Popular Loan Tapes

Loan exposures to corporate represent 67% of GBV and 64% of NBV.

Mortgages account for 25% of GBV and 28% of NBV.

Reclassifications and amendments to original loan tape data

Reclassification of pre-default customers:

In our assessment of the loan book and performing / non-performing split, we have specifically reviewed customers classified as Stage 2 under IFRS 9. The following sub-groups have been reclassified as NPL as a result of this analysis based on

⁵⁶ Mainly Sale and Repurchase Agreements.

characteristics that would indicate their likely migration in the short term to NPL status particularly in the event of insolvency of the Bank:

- Pre-default contracts (30 - 90 days in arrears) with an outstanding debt balance higher than the recoverable value of the collaterals received;
- All performing contracts where the customer has another contract in default and:
 - For the retail portfolio - the outstanding value on the performing contracts are higher than the recoverable value of the collaterals received;
 - For other segments – all contracts regardless of collateralisation level, but considering the materiality of the contract in default to the overall relationship (in line with EBA materiality thresholds).

This treatment is in line with the Bank of Spain Circular 4/2017.

Total exposures classified as NPL after this reclassification amount to €20.2bn representing 25.3% of GBV. 87% of these are represented by corporates. A further 10% of the NPL portfolio comprises exposure to mortgages.

Loan portfolio credit categories - PLs & NPLs focus

	Performing		Non-performing					
	# Accounts	GBV (Cm)	# Accounts	GBV (Cm)	% over total	NPL ratio	NBV (Cm)	NPL coverage
Non financial corporations (corporate)	307,656	35,643	95,784	17,662	87%	33%	9,621	46%
Secured	50,000	13,047	23,498	11,347	56%	47%	7,222	36%
Unsecured	257,656	22,596	72,286	6,315	31%	22%	2,399	62%
Lending for home purchase (mortgages)	201,016	17,997	20,226	2,101	10%	10%	1,838	13%
Secured	200,728	17,993	20,132	2,101	10%	10%	1,837	13%
Unsecured	288	3	94	1	0%	18%	1	21%
Consumer and other household loans	175,702	1,237	70,497	408	2%	25%	236	42%
Secured	241	29	22	2	0%	7%	2	12%
Unsecured	175,461	1,209	70,475	406	2%	25%	234	42%
General Government	276	4,370	23	20	0%	0%	15	28%
Secured	27	51	1	0	0%	0%	0	0%
Unsecured	249	4,319	22	20	0%	0%	15	29%
No Information	35,846	274	913	2	0%	1%	2	0%
Secured	1	0	1	0	0%	38%	0	0%
Unsecured	35,845	274	912	2	0%	1%	2	0%
Total	720,496	59,521	187,445	20,194	100%	25,33%	11,713	43,00%

Note: The coverage ratio in the table above is calculated on specific provisions and does not include generic portfolio-level provisions

Source: Banco Popular Loan Tape

Correcting interest rate for erroneous data

Interest payments are an important element in the generation of the cash flows of the Bank. In the loan data tape we found certain differences between the average interest rates therein and the average rates in the Spanish market and to the Bank's own rates as reported in the latest management reports. Analysis showed that this is mainly due to certain outliers (e.g. very high or very low rates) and these have been removed in developing the cash flow profile.

Overall methodology and approach to valuation of loans and advances to customers

We have modelled the expected cash flows from the loan book on the basis of a liquidation in the three time periods considered, as noted in Section 2.2.2.

The summary liquidation strategy considered would:

- Sell the NPL book as soon as possible to prevent further deterioration in the Bank's position and given the appetite in the Spanish market for such assets. This is consistent with experience in other bank liquidations;
- Manage the performing loan book for the time period of the liquidation, collecting interest and capital repayments over that time-frame and ultimately selling the remaining loans at the end of the period. For performing loans that

default during the liquidation, it has been assumed that these exposures would be packaged and sold to distressed investors on a rolling basis.

We have outlined the methodology used, the limitations to our work and the sensitivities that may influence the accuracy of the final outcome in the sections below considering separately Secured NPLs, Unsecured NPLs and PLs.

In order to estimate the cash flows, we have developed a detailed model for each asset class:

- For the sale of the NPL portfolios shortly after the start of liquidation, and the remaining PL portfolio at the end of the liquidation, we have considered that the NPL element of the book is most likely to be acquired by one or more private equity/distressed debt funds. The funds will value the secured book on an asset-by-asset basis with a primary focus on the cash flows associated with collateral realisation; the unsecured book would typically be valued based on historic payment cash flows; whereas
- Elements of the PL book may be acquired by the same or similar funds, or by other banks. Typically, non-bank investors will adopt a cash flow-based approach based on payment history. Bank investors, on the contrary, may adopt an alternative, expected loss approach utilising their own data for similar portfolios to drive any adjustments required to the expected loss parameters.

Experience of prior bank liquidations in other jurisdictions demonstrates that the liquidator may have significant issues with putting together a high quality data room and managing a transaction in the optimum way given the disruption and motivational issues affecting staff; this may have a significant impact on the timing of sales and the price achievable.

NPLs secured

a. NPL secured: overview

Non-Performing Loans LTV Categories

Segment	LTV Range	Number of Loans	% total secured	GBV (Cm)	% total secured	NBV (Cm)	WA Years to Maturity
Non-Performing Loans Secured							
Non financial corporations (corporate)	[0, 60%)	9,481	21.7%	2,113	15.7%	1,618	4.3
Non financial corporations (corporate)	{60%, 80%)	3,099	7.1%	1,155	8.6%	963	9.7
Non financial corporations (corporate)	{80%, 90%)	1,387	3.2%	466	3.5%	381	9.0
Non financial corporations (corporate)	{90%, 100%)	1,253	2.9%	587	4.4%	432	7.8
Non financial corporations (corporate)	{100%, ∞)	8,278	19.0%	7,026	52.2%	3,828	5.0
Total		23,498	93.8%	13,347	84.4%	7,222	5.7
Lending for home purchase (mortgages)	[0, 60%)	6,141	14.1%	309	2.3%	285	10.5
Lending for home purchase (mortgages)	{60%, 80%)	3,029	6.9%	319	2.4%	299	16.2
Lending for home purchase (mortgages)	{80%, 90%)	1,495	3.4%	172	1.3%	160	18.7
Lending for home purchase (mortgages)	{90%, 100%)	1,598	3.7%	200	1.5%	183	19.2
Lending for home purchase (mortgages)	{100%, ∞)	7,869	18.0%	1,100	8.2%	910	20.4
Total		20,132	46.1%	2,101	15.4%	1,837	18.5
Consumer and other household loans		22	0.1%	2	0.0%	2	10.5
General Government		1	0.0%	0	0.0%	0	16.9
No Information		1	0.0%	0	0.0%	0	11.8
Total NPLs Secured		43,630	100.0%	13,448	100.0%	9,061	7.6
Total NPLs Unsecured		143,793		6,744		2,853	
Total NPLs		187,423		20,192		11,914	

Source: Banco Popular Loan Tapes

66.6% of all Banco Popular's NPLs are secured by way of Real Estate collateral. Of these, 84.4% are corporate loans and 15.6% are mortgages. 67.1% and 61.9% respectively of corporate loans and mortgages by GBV have LTVs of more than 90%.

The indexed Real Estate Value is the value of the real estate collateral to the loans calculated as explained in this document later on in section *Collateral asset values* section.

b. NPL secured: Market standard approach

NPLs are a specialist asset class typically appealing to certain types of expert investor only. The due diligence approach to valuation is detailed and in-depth. Whilst there

are variations linked to portfolio type and granularity, a typical due diligence process to determine pricing would involve, *inter alia*:

- **Data tape analysis:** ensuring the availability of a comprehensive and accurate set of data tapes (borrower, loan, collateral) is the most critical part of the vendor due diligence process.
- **Payment history analysis:** analysis of the detailed payment history is very useful for secured portfolios and almost indispensable for unsecured portfolios.
- **Loans and security documentation review:** the value and enforceability of the security is a key element when evaluating NPLs.
- **Collateral valuation:** for secured NPL portfolios the vast majority of the recovery is driven by the enforcement and sale of the property collateral, and therefore the value and nature of those needs to be thoroughly assessed.
- **Bank Q&A:** in a classic portfolio transaction the buyer and seller would be in regular contact for the clarification of issues identified in relation to the workstreams described above.

c. NPL secured: key assumptions used

Collateral asset values

The main driver for the valuation of secured NPLs is the recovery of amounts from the sale of the repossessed assets. As such, the valuation of the Real Estate collateral is key. Critically, we have assumed that all the Real Estate presented in the Bank's data tape is existing, still part of the security package, and enforceable.

The third-party valuation reports provided by Banco Popular for collateral had not been updated for many years (the average third party appraisal date was 2009). As a result, we have indexed these values from the year in which the valuation was carried out to the Resolution Date. The index was developed by Deloitte based on the price evolution information provided by one of the leading appraisal companies in Spain, and the main macroeconomic indicators employed in the definition of the Debt to Income ratio produced by Deloitte based on information regarding, for example, regional income and costs. To validate and calibrate the index values, we have also performed desktop valuations on a sample of 122 repossessed properties.

Legal status and timing of asset sale

No reliable indicator was provided in the Final Data Tape as to whether or not legal proceedings had commenced for each NPL and no sub-markers were provided to demonstrate which stage of the legal process had been reached. For developing the underlying cash flows, we have assumed that all NPL positions are enforced via legal procedure with exit timing being the sum of the enforcement timing and of the property sale timing.

On average, we have assumed 24 months for repossession and sales timing ranging between 12 and 24 months.

The specific assumptions for the timing of sales consider:

- Differences in the type of real estate (for example, residential properties would typically take less time to sell than land); and
- Sensitivities were included on sales' timings by adding and subtracting 6 months from our Base Case estimates in our low and high cases respectively.

Debt ranking and syndication

The recoverability of any loan is highly dependent on a bank's collateral ranking where multiple lenders have recourse to the same underlying asset whether through

syndicated facilities or alternative bilateral arrangements. Typically, where the bank does not have a first lien position, recoverability will be minimal or nil.

In the course of our work, we have received no information on collateral ranking or on the existence of syndicated lending. In the absence of this, or any publicly available benchmarks, we have made the assumption that all debt rankings are first liens.

Recovery and ongoing costs

The following costs of recovery have been included in the valuation model:

- Legal costs: high level assumptions on typical legal and enforcement costs of between 7% and 10% have been assumed for the purposes of the valuation based on historical observations of similar exposures;
- Asset disposal costs: average disposal costs (agency fees, taxation, etc.) in the region of 5% over the sales proceeds in line with typical Spanish market characteristics have been assumed;
- Asset management costs: typical asset management fees of between 8 and 10 basis points have been assumed for the running of the property portfolio in the period between foreclosure and sale.

Other NPL secured portfolio assumptions

Other portfolio-based drivers have been included as overlays to the general portfolio cash flows. These take into consideration the costs of acquiring and managing the portfolio, as well as the risk/returns associated with it. These can be summarised as:

- Servicing costs: the fees that a Spanish-based, specialised servicer would typically charge to manage a portfolio of this nature on behalf of the investor;
- Transaction costs: the acquisition of an NPL portfolio incurs significant due diligence and other costs on the part of the purchaser; transaction costs proportionate to the size of the NPL portfolio have been assumed; and
- IRR: we have assumed that the distressed investors interested in this type of portfolio would require IRRs of between 16% in the high case and 20% in the low case which are higher than what we are observing in the market due to the fact that a sale of an NPL portfolio in a liquidation scenario would have to factor in:
 - Expected lesser quality of the processes and information provided to the potential buyers;
 - Inability of the seller (the liquidator) to provide representations and warranties in the Sales and Purchase Agreement.

NPLs unsecured

a. NPL unsecured: overview

Non-Performing Loans Categories

Segment	Number of Loans	% total	GBV (Cm)	% total	NBV (Cm)
Non-Performing Loans Unsecured					
Non financial corporations (corporate)	72,286	50.3%	6,315	93.6%	2,399
Lending for home purchase (mortgages)	94	0.1%	1	0.0%	1
Consumer and other household loans	70,475	49.0%	406	6.0%	234
General Government	24	0.0%	20	0.3%	15
No information	912	0.6%	2	0.0%	2
Total NPLs Unsecured	143,791	100.0%	6,744	100.0%	2,651
Total NPLs Secured	43,654	100.0%	13,458	100.0%	9,861
Total NPLs	187,445	100.0%	20,194	100.0%	12,712

Source: Banco Popular Loan Types

33.4% of all Banco Popular's NPLs are unsecured. Of these, 93.6% are corporate loans.

b. NPL unsecured: key assumptions used

Use of market benchmarks

No historical payment data on unsecured NPLs has been made available to us. As a result, we have been unable to develop recovery curves and instead we have had to rely on market benchmark pricing based on comparable transactions to value the unsecured NPL portfolio. Market-based sub-portfolios were created and comparable multiples applied in line with this segmentation.

A range of multiples have been used to reach base case, best case and worst case estimates as detailed below.

Segment	Price / GBV	
	Worst	Best
Non financial corporations (corporate)	2.0%	11.0%
Lending for home purchase (mortgages)	4.0%	8.0%
Consumer and other household loans	4.0%	8.0%
General Government	4.0%	11.0%
No information	4.0%	11.0%
Weighted average	2.0%	11.0%

Source: market comparable; Deloitte analysis

The above market multiples are based on averages compiled by Deloitte based on non-public information.

We note that benchmark pricing may not be a wholly reliable estimate for the realisable value of the unsecured NPL portfolio.

c. NPL secured and unsecured:

Summary of assumptions for best and worst case

As explained earlier in the Report, NPLs are assumed to be sold in December 2018, i.e., roughly 18 months after the Reolution Date, in all scenarios: 18 months, 3 years, and 7 years.

Within each of these three exit timeframes, a limited number of assumptions have been flexed in order to obtain best and worst case scenarios. All have been described in their respective sections above but, for clarity, we summarise them below:

- **NPL secured**
 - *Exit timing:* different exit timings of between 12 and 24 months have been assumed for each position depending on the type of real estate securing the loan. In the best case and worst case scenarios 6 months have been respectively subtracted from and added to the timing of each position;
 - *Discount rates:* the portfolio remaining after 18 months from the Reolution Date is sold to an NPL investor that will apply a discount rate to the forecasted cash flows in line with the market for such assets. The IRR is assumed at 16% and 20% respectively for the best case and worst case scenarios respectively.
- **NPL unsecured**

Market comparables: as it can be seen in the respective section and its table, different comparables have been used for different segments of the NPL portfolio. Those are based on recent transactions in the Iberian market. For the best case and worst case we have used, respectively, the highest and lowest Price/GBV multiples observed. Those average out at 11.0% in the best case and 2.0% in the worst case.

Impact of using high-level assumptions

As explained in several parts of the NPL section, certain high-level assumptions had to be made due to the lack of suitable data. It is not possible to quantify the exact

impact of each of these assumptions on the overall liquidation recoveries but, in some cases, a directional indication can be provided.

The table below indicates if the approach taken with each high-level assumption has been accretive or decreative from the liquidation recovery modelled. Note that this table does not refer to all assumptions of the model but only to those made because of the lack of suitable data.

Assumption	Value impact
All the real estate provided in the collateral tape is existing, still part of the security, and enforceable	Accretive
Use of indexed real estate values instead of actual valuations	Cannot be determined
Impact on recoveries assuming that all positions exited via legal procedure instead of a combination of strategies, including negotiated and extra-judicial	Decretive
Impact on timing assuming that all positions exited via legal procedure instead of a combination of strategies, including negotiated and extra-judicial	Decretive
Impact assuming that all positions are 1 st lien ranking instead of a combination of 1 st lien and greater	Accretive
For unsecured NPLs use of market multiples instead of discounted cash flows based on historical recovery curves	Cannot be determined

d. Cross-checking results with other approaches

As described above, the NPL portfolio has been assessed on the basis of a sale in the market after a relatively short time after the liquidation. As such the assumptions we have used are made in the context of the price that an investor would pay to acquire the portfolio.

We have cross-checked the results obtained to the Price / GBV ratios currently paid on similar secured and unsecured NPL portfolios. This provides reasonable comfort that our valuation is in line with the market and, in fact, possibly on the high side.

NPL pricing (Cm)

	GBV	Estimated price	Price / GBV
Worst case	20,194	4,058	20.1%
Best case	20,194	6,010	29.8%

Source: Deloitte analysis

a. PLs: overview

Performing Loans distribution

Segment	Number Of Loans	% total	GBV (Cm)	% total	NBV (Cm)
Total Performing Loans					
Non financial corporations (corporate)	307,656	42.7%	35,643	59.9%	35,504
Lending for home purchase (mortgages)	201,016	27.9%	17,997	30.2%	17,979
Consumer and other household loans	175,702	24.4%	1,237	2.1%	1,223
General Government	276	0.0%	4,370	7.3%	4,370
No information	35,846	5.0%	274	0.5%	274
Total	720,496	100.0%	59,521	100.0%	59,350

Source: Banco Popular Loan Tapes

Valuation of difference in treatment - Banco Popular Español

The majority of the Performing Loans book is represented by two segments: 59.9% are corporates and 30.2% are mortgages.

52.3% of all Performing Loans are secured by real estate collateral.

Performing Loans Secured LTV Categories

Segment	LTV Range	Number Of Loans	% total secured	GBV (Cm)	% total secured	NBV (Cm)	WA Years to Maturity
Performing Loans Secured							
Non financial corporations (corporate)	[0, 60%)	29,923	11.9%	5,472	17.6%	5,457	9.4
Non financial corporations (corporate)	[60%, 80%)	8,295	3.3%	2,532	8.1%	2,526	11.6
Non financial corporations (corporate)	[80%, 90%)	3,038	1.2%	1,003	3.2%	999	13.1
Non financial corporations (corporate)	[90%, 100%)	2,172	0.9%	817	2.6%	815	13.8
Non financial corporations (corporate)	[100%, ∞)	6,572	2.6%	3,224	10.4%	3,194	12.4
Total		50,000	19.9%	13,047	41.9%	12,991	11.3
Lending for home purchase (mortgages)	[0, 60%)	97,912	39.0%	5,259	16.9%	5,256	14.8
Lending for home purchase (mortgages)	[60%, 80%)	41,541	16.6%	4,541	14.6%	4,538	20.5
Lending for home purchase (mortgages)	[80%, 90%)	19,702	7.8%	2,455	7.9%	2,453	23.0
Lending for home purchase (mortgages)	[90%, 100%)	14,980	6.0%	1,964	6.3%	1,962	24.6
Lending for home purchase (mortgages)	[100%, ∞)	26,593	10.6%	3,775	12.1%	3,767	26.8
Total		200,728	80.0%	17,993	57.8%	17,974	20.9
Consumer and other household loans		241	0.1%	29	0.1%	29	17.2
General Government		27	0.0%	51	0.2%	51	10.1
No Information		1	0.0%	0	0.0%	0	-
Total PLs Secured		250,997	100.0%	31,120	100.0%	31,047	16.8
Total PLs Unsecured		469,499		28,401		28,304	
Total PLs		720,496		59,521		59,351	

Source: Banco Popular Loan Tapes

Performing Loans Maturity Year

Segment	Maturity Range	Number Of Loans	% total secured	GBV (Cm)	% total secured	NBV (Cm)	WA Years to Maturity
Non financial corporations (corporate)	-	21,810	3.0%	542	0.9%	540	-
Non financial corporations (corporate)	[0, 1.5)	145,109	26.1%	12,349	20.7%	12,302	0.4
Non financial corporations (corporate)	[1.5, 3.5)	63,801	8.9%	4,808	8.1%	4,794	2.6
Non financial corporations (corporate)	[3.5, 7.5)	48,508	6.7%	7,526	12.6%	7,494	5.1
Non financial corporations (corporate)	[7.5, ∞)	28,428	3.9%	10,419	17.5%	10,374	14.9
Total		207,656	42.7%	25,644	59.3%	25,504	5.9
Lending for home purchase (mortgages)	-	203	0.0%	1	0.0%	1	-
Lending for home purchase (mortgages)	[0, 1.5)	7,237	1.0%	52	0.1%	52	0.9
Lending for home purchase (mortgages)	[1.5, 3.5)	11,671	1.6%	197	0.3%	196	2.7
Lending for home purchase (mortgages)	[3.5, 7.5)	23,164	3.2%	816	1.4%	816	5.8
Lending for home purchase (mortgages)	[7.5, ∞)	158,541	22.0%	16,931	28.4%	16,915	22.0
Total		301,016	27.9%	17,997	38.2%	17,978	10.8
Consumer and other household loans		175,702	24.4%	1,237	2.1%	1,223	6.5
General Government		276	0.0%	4,370	7.3%	4,370	5.8
No Information		35,846	5.0%	274	0.5%	274	3.0
Grand total		720,496	100.0%	59,521	100.0%	59,351	10.4

Source: Banco Popular Loan Tapes

Mortgages, at 20.9 years weighted average remaining years to maturity are the loans with the longest remaining life. Corporates have a much shorter weighted average maturity of 5.9 years remaining.

b. PLs: key assumptions used

We have utilised an adjusted expected loss methodology for estimating cash flows on the performing book. We have estimated the cash flows from the collection of principal repayments and interest taking into account the loan contract information in the data tape. We have made adjustments to these cash flows for prepayments, defaults and recovery rates on the portfolio based on a liquidation scenario for the different time horizons considered. Further information on these key components is outlined below.

Prepayments of Corporate customers

We have assumed that prepayment rates are likely to be significantly higher in a liquidation scenario than has historically been the case for a going concern bank as customers who have the ability to do so will tend to migrate to other financial institutions and repay their debt with the Bank. The other large Spanish banks are also likely to actively try to attract the best customers from the Bank in liquidation. This would lead to a customer migration and prepayment on a much larger scale than under a business as usual scenario.

This is particularly true for **Corporate** customers that, for the running of their daily operations, must rely on a fully functioning bank that can offer products and services

such as revolving credit facilities (RCFs), further drawdowns, Point of Sale (POS) function, and many others. The Bank will not be able to continue offering such services after having been placed into liquidation and, as such, a substantial rate of migration of corporate clients to other institutions is to be expected.

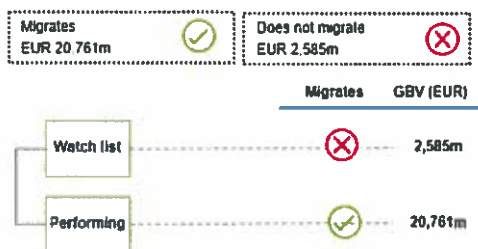
In our analysis we have assumed that all corporate customers will migrate with the exception of:

- Companies currently in watch list, which are unlikely to be able to refinance with a different bank; and
- Property development companies where competitor banks had little appetite at Resolution Date.

In the sections below we detail the analysis of the impact of prepayments on the Bank.

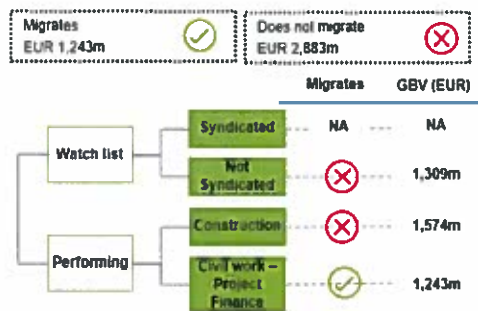
SMEs –€23,346m of exposures

All of the exposures not in watch list are expected to migrate to another institution for the aforementioned operational reasons.



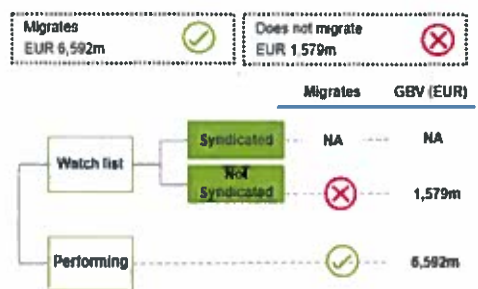
Construction– Civil work – Project finance – €4,126m of exposures

Within this segment of the portfolio we would expect relatively little migration as a good portion is in watch list status and the sub-segment of Construction has very limited appeal to other Spanish banks.



Large corporates – €8,171m of exposure

All of the performing exposures are expected to migrate to another institution for the aforementioned operational reasons.



All Corporate customers

As a result of the above, we estimate that, out of €35,643m of performing corporate exposures, €28,596m will migrate to a competitor bank within 1 year of the insolvency starting. This represents c. 80.23% of all performing corporate exposures.

Prepayments of Residential Mortgage customers

The bank’s insolvency is also expected to affect **Residential Mortgage** prepayments as well. Some customers will be unable to migrate to other banks either because of their poor credit rating or because of high LTV. Others would not move because the term remaining on their mortgage is short and therefore it may not be worth the effort. On the other hand, customers with good credit rating and/or low LTVs will have a choice of either remaining with the Bank or moving to another institution.

These dynamics are summarized in the diagram below.



Customers with an LTV less than 90% that are neither in watch list or that have a maturity term left greater than 2 years are more likely to want to migrate. Their willingness to move to another bank, however, will depend on their ability to find a mortgage in the market at below the interest rate that they are currently paying at Banco Popular. Mortgages that are currently at Banco Popular at rates at below market levels are unlikely to want to move. The below matrix explains the relationship between LTV, interest rate, and migration willingness.

LTV %	INTEREST %															
	[0 - 0.5]	[0.5 - 0.6]	[0.6 - 0.7]	[0.7 - 0.8]	[0.8 - 0.9]	[0.9 - 1.0]	[1.0 - 1.1]	[1.1 - 1.2]	[1.2 - 1.3]	[1.3 - 1.4]	[1.4 - 1.5]	[1.5 - 1.6]	[1.6 - 1.7]	[1.7 - 1.8]	[1.8 - 1.9]	[1.9 - 2.0]
[0 - 50]	<div style="display: flex; justify-content: space-between;"> Migrates Does not migrate </div>															
[50 - 60]																
[60 - 70]																
[70 - 80]																
[80 - 90]	679m															

Also note that there are no barriers to prevent a customer moving their mortgage to another provider notwithstanding the fact that certain loans have a prepayment fee. Customers with deposits at Banco Popular will have to find an alternative provider for the deposits and we consider it likely that those providers will give incentives and simplify the process of moving their other products. As a result, we do not consider this fee to be a disincentive to customers moving their mortgages. We also consider the liquidator may be unable to enforce the prepayment fee if customers are seen as having to move because of operational difficulties of Banco Popular following the liquidation. Finally, we estimated these fees to be in the region of €40m, for all customers leaving the Bank, (i.e. not material) and therefore we have not included income related to this.

Based on the analysis above it is estimated that, out of €17,997bn of performing mortgage exposures, €6,038bn will migrate to a competitor bank within 18 months of the insolvency starting. This represents c. 33.55% of all performing mortgage exposures.

PDs and LGDs

When underwriting portfolios for acquisition or securitization, private investors would typically look at the default and recovery curves produced from the historical

payment history of the loans. The payment data to conduct this analysis was not available to us in our work. In the circumstances, a number of assumptions had to be made as set out below, including the use of PDs and LGDs as proxies for the default and recovery curves.

Probability of default (PD)

To determine the probability of a performing loan going into default during the liquidation period, we obtained the 12-month PD (probability of default in 12 months) reported by Banco Popular at 6 June 2017. We understand these 12-month PDs were calculated based on actual experience of the portfolio over the preceding years. We compared these 12-month PDs to the PDs estimated by other entities in the sector, in order to assess their reasonableness and concluded that the 12-month PD data provided by Banco Popular is in line with these benchmarks.

We have used these 12-month PDs to derive a lifetime PD over the maturity of each loan, based on a survival methodology.

Loss Given Default (LGD)

In order to calculate the LGD, we used the following formula:

LGD = LGL x (1-Cure rate), where:

- i. LGL is "Loss Given Loss", representing the difference between the exposure at default and the collateral recovery value.

The exposure at default has been calculated at contract level. The Recovery value is the expected cash flow from the collateral and other credit enhancements that are part of the contractual conditions and are not separately recognised by the bank.

The recovery value of each collateral asset has been estimated reviewing and adjusting the appraisal value informed by the bank in the CDB provided:

$$RV_i = VRef_i * (1 - HC_t - Cext_t - Cmnt_t - Csl_t)$$

Where:

RV_i: Recovery Value of the collateral

VRef_i: Appraisal value of the collateral provided by the entity

HC_t: indexation applicable to VRef_i in order to obtain the collateral fair value at the point of default

Cext_t: Expected repossession costs for the collateral.

Cmnt_t: Expected maintenance costs for the collateral from repossession

Csl_t: Expected costs aroused in the sale of the collateral.

- ii. The cure rate is the probability of a loan "curing" from default back to performing.

The cure rates reported by Banco Popular at 6 June 2017 have been compared to the cure rate estimated by other entities in the sector, in order to assess their reasonableness.

Cure rates provided by Banco Popular have been slightly adjusted as the Bank considers a cure rate for those operations with more than 21 months of default. We have considered that in liquidation, curing from this position is not likely and the only recovery value would be derived from the execution and sale of the collateral. This is also in line with the Bank of Spain Annex IX of Circular 4/2017.

Discount rate for the rump of the portfolio

At the end of the liquidation period the liquidator will sell down any remaining loan exposures (the "rump"). These loans are assumed to be disposed in a portfolio sale to one or more investors with the price discounted at the acquirer's required returns.

The rump of the portfolio at each assumed scenario exit will be composed as follows:

Loans final rump (Cm)

Segment	GBV		
	18 months	3 years	7 years
Lending for home purchase	11,097	9,942	7,632
Non financial corporations	5,327	3,045	178
General Government	965	593	83
Consumer and other household loans	3,257	1,805	0
No information	105	43	-
Total	20,751	15,428	7,894

Source: Deloitte analysis

The discount rate used for the valuation of the sale of the rump at the end of the liquidation timeframe in each scenario reflects the required return rates in the Spanish market for each asset class based on the forecast risk profile at the time of liquidation with some adjustments to take into consideration the fact that:

- The data available and process run by the liquidator are likely to be sub-standard in comparison with a standard market transaction in a non-stressed situation creating additional uncertainty and risk for the buyer;
- The seller being a liquidator will not be able to provide representations and warranties in the Sales and Purchase Contract that would be typical in a non-stressed sale.

As a result of the above, we have assumed discount rates for the rump of the portfolio for the different scenarios as shown below:

Loans final rump discount rate (Cm)

Scenario	Best case	Worst case
18 months	6.5%	7.9%
3 years	6.1%	7.4%
7 years	5.1%	6.1%

Source: Deloitte analysis

The changing discount rates used in the different exit time scenarios reflect the evolving mix of the different asset classes in the portfolio and their respective assumed discount rates.

Note that in the exit assumptions for the sale of the rump, we have assumed that there are no regulatory or regulatory capital restrictions on a bank acquiring the Banco Popular rump PL portfolio. We have also assumed that banks would be able to raise sufficient capital to invest in such a large volume of PLs. In practice, either of these assumptions may prove to be optimistic particularly if any large scale or longer term market dislocation occurs as a result of the insolvency.

In addition, no account has been taken of costs that might be incurred by the acquirer to refinance the portfolio(s) acquired, for example those associated with rating agencies, underwriters, etc. in the case of a securitisation).

Summary of assumptions for best and worst case

All assumptions are the same in the three liquidation scenarios (18 months, 3 years, and 7 years), with the exception of the discount rate of the rump, as described in the respective section of this document.

Within each of these three scenarios, the discount rate in the best and worst cases vary. The discount rates applied in each of these six combinations can be seen in the respective section.

Impact of using high-level assumptions

As explained in several parts of the Report, certain high-level assumptions had to be made due to the lack of suitable data. It is not possible to quantify the exact impact of each of these assumptions on the overall liquidation recoveries but, in some cases, a directional indication can be provided.

The table below indicates if the approach taken with each high-level assumption has been accretive to or decreative from the recovery to shareholders and debt holders. Note that this table does not refer to all assumptions of the model but only to those made because of the lack of suitable data.

Assumption	Value impact
Using the expected loss methodology (PDs and LGDs) when forecasting defaults and recoveries instead of deriving default and recovery curves from historical payment history	Accretive

Outcome for Banco Popular

Loans and receivable estimated asset realisation (€m)

Assets	NBV (6 June 2017) ⁽¹⁾	18M Scenario		3Y Scenario		7Y Scenario	
		Best case	Worst case	Best case	Worst case	Best case	Worst case
PLs	59,350	52,563	51,650	54,412	53,736	56,799	56,450
NPLs	11,712	6,061	4,095	6,061	4,095	6,061	4,095
Total	71,062	58,624	55,745	61,473	57,831	62,860	60,545

Source: Deloitte analysis

4.2. Real Estate assets

Overview

The real estate portfolio includes both foreclosed assets and own use assets. Foreclosed assets include a portfolio of non-current assets held for sale (accounted for at fair value), as well as investment properties that are rented and inventories in subsidiaries that undertake property development activity. Own use properties principally consist of the branches, headquarters premises, such as Abelian or Luca de Tena, and furniture, such as chairs, tables, closets, and shelving, and electronic equipment, such as computer hardware and printers.

Real Estate NBV (€m)

Classification	NBV Assumed (31 May 2017)	NBV Financial Statements (6 June 2017)	Diff
Foreclosed assets	3,498	3,481	(17)
A. Non-current assets held for sale	3,056	2,954	(102)
B. Investment property	442	527	85
C. Inventories	-	-	-
Own use	247	247	-
A. Building & branches	117	117	-
B. Furniture	129	129	-
Total	3,745	3,728	17
<i>Non reconciled difference</i>	-	17	(17)

Source: Banco Popular Individual Financial Statements; individual data tape at 31 May 2017

We obtained a data tape for real estate assets from Banco Popular, dated 31 May 2017. There is a difference of €17m, which is not considered material.

Methodological approach and hypothesis explanation

We set out our views on the appropriate liquidation strategy for real estate assets in section 3.2, namely a phased realisation of assets over the course of the liquidation (18-month, 3-year and 7-year scenarios). In our opinion, this is the most appropriate strategy to maximise value from the assets and reflects our knowledge of the Spanish real estate market, the Bank's portfolio and our views as to how the market is likely to evolve in the future regarding the price evolution forecasts and macroeconomic estimations (see also section 2.3 – Macroeconomic context).

We have set out the anticipated phasing of the realisations for the three scenarios for liquidation duration.

Liquidation scenario cash flows

Scenario	2H 2017	2018	2019	2020	2021	2022	2023	1H 2024
18 months	13.1%	86.9%	-	-	-	-	-	-
3 years	13.1%	22.8%	22.8%	41.3%	-	-	-	-
7 years	13.1%	22.8%	22.8%	21.0%	12.0%	5.4%	2.2%	0.7%

Source: Deloitte analysis

For foreclosed properties (€3,480m), we applied the following approach to estimate the amount which could be realised in a liquidation scenario:

- A desktop valuation methodology using a statistical model developed by Deloitte that incorporates a national database of values and takes into account the heterogeneity of the Spanish regions and specific local real estate conditions ("Top-Down - initial approach"). This methodology adjusts the latest appraisal value provided for each asset (typically the average latest available appraisal dates were 2016) considering its location, typology, status, and other macroeconomic inputs, such as CPI, unemployment rate, disposal income, labour force, etc. to a current value as at the Resolution Date. Then this updated value is projected forward to the point of sale using a forward price index (the same used for "collateral asset value" in Loans and Receivables) which reflects on a regional basis real estate price increases over the period. Then it is discounted using a market-based discount rate deducting also maintenance costs during the sale period (approximately an average of 0.3% of the market value per year) and sale costs (approximately 5%).
- The expected cash flows from the sales are linearly projected during the time to sell, estimated for each asset (i.e. 10 years). In each given liquidation scenario (18 months, 3 years and 7 years) the remaining volume is sold at the end of the liquidation period with the remaining cash flows discounted using a market-based discount rate defined considering the liquidation scenario and the time to sale, including market capacity.

Our approach for Own Use assets (€247m) was as follows:

- Building and branches
 - We assessed a 191 branch sample, corresponding to a NBV of €103m (89% of the total) on an individual basis to estimate fair value as at 6 June 2017 and extrapolated to cover the remaining properties.
 - We analysed the branch network (including leased assets) to determine a "Run-off portfolio" (office buildings and branches that will be maintained during the entire liquidation period) and a "disposal portfolio". The "Run-off portfolio" retained during the entire liquidation period comprises the most operationally significant properties (owned and leased) in terms of location, size and representativeness such as O.P. branches (main offices) in all the regions and headquarters. The remaining properties are gradually sold considering market capacity.

- Thereafter we applied a similar approach to the above for foreclosed assets, indexing the values forward to the anticipated point of sale and discounting for a market based discount.
- For leased assets, we have included early termination costs derived from rents for the remaining lease term as claims against the Estate. We have used the entire contractual compensation for this, and not adjusted for any potential negotiated outcome.
- Furniture with NBV of €129m has been included in the analysis with a recovery of 0.1% estimated based on realisations in the previous liquidation case of Banco Madrid, and considering that there is no secondary market for this product in Spain.

Outcome of valuation

Banco Popular Real Estate assets are estimated to realise the following in a liquidation scenario:

Real Estate estimated asset realisation (€m)

Real Estate assets	NBV (6 June 2017) ⁽¹⁾	18M Scenario		3Y Scenario		7Y Scenario	
		Best case	Worst case	Best case	Worst case	Best case	Worst case
Foreclosed assets	3,498	2,436	2,179	2,747	2,544	2,860	2,677
A. Non-current assets held for sale	3,057	2,113	1,889	2,386	2,209	2,489	2,330
B. Investment property	442	323	290	361	335	370	347
C. Inventories	-	-	-	-	-	-	-
Own use	117	78	73	85	79	86	81
A. Building & branches	117	78	73	85	79	86	81
Total (Incl. Furniture)	3,616	2,514	2,252	2,832	2,624	2,946	2,758
B. Furniture	129	0.1	0.1	0.1	0.1	0.1	0.1
Total (Incl. Furniture)	3,745	2,514	2,252	2,832	2,624	2,946	2,758
Non reconciled difference ⁽²⁾	(17)						
Total	3,728						

(1) Last information obtained from the RE data tape is at 31 May 2017

(2) €17m difference between 6 June and 31 May information
Source: Deloitte analysis

Sources of uncertainty

The realisations from the real estate assets are dependent on the strategy for phasing sales; assumptions around the macroeconomic forecast; and the assumed discount rate for sales. We have considered the results of our analysis compared to recent market activity for real estate portfolios, including the subsequent sale of this specific book of real estate assets to Blackrock, and note that our overall result is broadly in line with these market transactions.

4.3. Tax assets

Overview

Tax assets as of 6 June 2017 were as follows:

DTA NBV (€m)

Tax Assets	NBV (6 June 2017)
CTA	170
Protected DTA	2,031
Non Protected DTA	3,491
Total	5,692

Source: Banco Popular Individual Financial Statements

As noted in Section 3.2 and below, we consider that the liquidator would request refund of the CTAs and conversion of the Protected DTAs through the submission of the 2017 Corporate Income Tax Return to the Spanish Tax Authorities, to be filed in 2018. Non-protected DTAs rely on taxable profits, which would not arise in liquidation.

Methodological approach and hypothesis explanation

The estimated recoverability or realisation of tax assets is based on the provisions for legal dissolution defined in the Spanish Tax Legislation.

We have reviewed the criteria adopted by Banco Popular for the recognition of protected DTAs and non-protected DTAs and consider it to be conceptually reasonable according to the applicable Spanish tax legislation. In addition, we have verified that the amount of Protected DTAs registered at 6 June 2017 is the same as the amount registered at December 2016, which had been reviewed by the external Statutory Auditor.

The treatment of tax assets in a liquidation is as follows:

- **CTAs:** Recoverability does not rely on future profits; the liquidator would expect to recover the full book value.

According to the information provided by Banco Popular, €61m of the amount registered should be considered for tax purposes as non-protected DTAs. For the purposes of our analysis this amount has been reallocated.

Recovery of the remaining balance would be achieved through the corresponding Corporate Income Tax Return (FY2017 or 2018) or Value Added Tax Returns.

- **Protected DTAs:** Recoverability does not necessarily depend on future profits. Protected DTAs can be converted into credit against the Spanish Tax Authorities when at least one of the following conditions are met:
 - (i) Recognition of accounting losses in the audited financial statements⁵⁷; or
 - (ii) The entity is liquidated or declared insolvent by the relevant court⁵⁸.

Consequently, of the declaration of insolvency, circumstance detailed in point ii) above occurs, and therefore Protected DTAs assets will be converted into a credit against the Spanish Tax Authorities⁵⁹. The request for the conversion would be performed through the corresponding Corporate Income Tax Return (likely FY2017)⁶⁰. For the purposes of our analysis we consider that the full balance would be recovered; however we note that given the amount of the requested credit a tax audit would most likely occur prior to payment which could delay repayment or indeed reduce the amount of the final realisation.

Finally, it is unlikely that new Protected DTAs could be generated in the tax periods between the declaration of insolvency and the legal extinction of Banco Popular⁶¹.

⁵⁷ In case of recognition of accounting losses, the amount subject to conversion will be determined by the result of applying the percentage represented by the accounting losses for the year to the sum of capital and reserves over the total thereof.

⁵⁸ In this case the conversion of all the remaining amount of Protected DTAs could be requested.

⁵⁹ In the conversion, taxpayer may choose between: i) claiming a payment of the amount of the credit from the Tax Authorities, or ii) offsetting those credits against other tax liabilities.

⁶⁰ It is likely that, because of the accounting losses recorded in 2016, it has already been requested (through the 2016 CIT Return) the conversion into a credit against the Spanish Tax Authorities of part of the amount corresponding to Protected DTAs.

⁶¹ From 2016, because of the legislation amendments, new DTAs generated could only be considered as protected up to the limit of the CIT liability obtained in the tax period. Considering that no CIT liability has been recognized in 2016 Annual Accounts and that no taxable profits are being forecast in the liquidation, only DTAs generated until 2015 DTAs

- **Non Protected DTAs:** As noted, this includes €61m reallocated from CTA's.

Recoverability is dependent on future taxable profits. Likewise, according to the tax legislation currently in force, Non protected DTAs cannot be sold separately.

Non protected DTAs not utilised prior to extinction period of the entity will be lost. No taxable profits are being forecast in the liquidation against which non-protected DTA's could be off-set. In any case, if taxable profits are generated in the mentioned period, Non protected DTAs could only be utilised against new (future) tax liabilities, arising no impact for valuation purposes.

Therefore, no realisation is expected from the Non-protected DTAs, other than to the extent to set off against the DTLs already recognised.

Finally, additionally, for the same reason, no realisation is expected from the Non-protected DTAs to be generated, if applicable, in the liquidation period (FY2017 onwards).

Outcome of valuation

No range has been considered in the valuation. The total realisable value in liquidation of CTAs and DTAs is estimated as follows:

**DTA estimated asset realisation
(Cm)**

Tax Assets	Realisation
CTA	109
Protected DTA	2,031
Non Protected DTA	194
Total	2,334

Source: Deloitte analysis

We have assumed that the payment of CTAs and Protected DTAs could be requested within 18 months. In terms of the non-protected DTAs the values above represent set off against DTLs recognised.

Assuming that the insolvency would be declared during 2017, the conversion of Protected DTAs into a credit against the Spanish Tax Authorities would be requested through the FY2017 Corporate Income Tax Return (to be submitted in July 2018). Likewise, the CTAs would also be mainly requested through the same Return.

The Spanish Tax Authorities generally have a 6-months deadline, from the date when the relevant return is submitted, to refund of the requested tax assets. Nevertheless, in some cases the refund is carried out later (in the case of CTAs interest is payable by the Tax Authorities on any delay). As above, given the size and circumstances of the claim, it is expected that an audit would be commissioned and that, in practice, the recoverability could take more than 6 months, although the impact on overall recovery would not be significant. In any case, the legislation establishes a 4-year statute of limitations for reviewing the Corporate Income Tax returns.

could be considered as protected, and therefore, subject to conversion into a credit against the Spanish Tax Authorities. In any case, if taxable profits are generated in the liquidation periods, Non Protected DTAs would be utilized against the potential CIT liabilities as a most probable treatment, and therefore, no CIT liability arises.

4.4. Joint Ventures, Associates and subsidiaries assets

Overview of the asset

The balance sheet of Banco Popular as at 6 June 2017 shows investments in subsidiaries, joint ventures and associates of €9.9bn (of which €1.6bn are the investments in Banco Pastor, Banco Popular Portugal and Popular Banca Privada).

JV, Subsidiaries & Associates NBV (€m)

Inv. In Associates, Subsidiaries & JV	NBV (6 June 2017)	Best case	Worst case
On going	8,271	8,382	7,496
Insolvency proceeding	1,627	-	-
Non reconciled difference ⁽¹⁾	10	-	-
Total	9,908	8,382	7,496

(1) €10m difference due to unavailability of data tape as of 6 June 2017
Source: Banco Popular Individual Financial Statements

As set out above in section 3.1., a liquidation of Banco Popular would have consequences for the rest of the group subsidiaries, joint ventures or associates including forcing a number of these into an insolvency process. In turn, the outcomes from those processes will inform the overall recoveries to Banco Popular.

We considered the potential contagion effect from the subordination of intra group debt in Banco Popular leading to write down in corresponding intra group assets in subsidiaries.

- For entities that would go into insolvency proceeding as a consequence of Banco Popular's liquidation, we estimate that there would be no recoveries on the equity investments (this includes Banco Pastor, Popular Banca Privada and Banco Popular Portugal – see sections 3.1 and 6).
- 38 entities were identified that would remain on-going which might (initially at least) remain outside a liquidation process. The NBV of the investment in these investees of Banco Popular amounted to €8.3bn. Extraction of value from these entities would be either through realisation of the underlying assets or through a sale of the shares in the relevant entity by the liquidator. The rest of this section focuses on the ongoing entities.

Methodological approach and hypothesis explanation

For the 38 entities on going, we obtained the latest available financial information before 6 June 2017 and selected the valuation methodology for each entity taking into account: the amount of the stake held by the Bank, the industry in which the entity operates and the information available which might assist our analysis.

We have considered the fair value of the resulting entities, which could be sold as going concern (through share sales) as a proxy for the amount which a liquidator might be able to realise (there are a number of factors which could impact Fair Value). We have based our analysis on: third party valuation reports; offers or price indications received; transactions already announced; price of put / call options included in investment agreements; and, other valuation techniques as summarised below:

The **market approach** based on guideline public company and transaction methods to estimate the market value of those entities with an underlying business. This includes comparison of the subject to similar investments or assets that have been sold or offered for sale. We have analysed implied prices at which comparable companies are being valued by the market, both using transactions and guideline public companies multiples. For those entities for which an offer or price indication had been received recently prior to resolution, we assumed that the potential bidder

had a deep knowledge of the Bank's situation as of the offer date and, therefore, no discount was applied.

The **asset approach** seeks to estimate the value of a business or a business ownership interest, by quantifying the amount of money required to replace the investment or asset with another one having equivalent utility. This approach includes adjusted book value and book value methodologies.

The adjusted book value method is a method within the asset approach, whereby some assets and liabilities are adjusted to their fair value. This approach was mainly used to value real estate entities whose specific assets have been valued at fair value and, therefore, the equity was adjusted based on the resulting value increases / reductions from the real estate valuation.

The real estate valuation was a desktop approach based on a statistical model developed by Deloitte, which takes into account the heterogeneity of the Spanish regions and their local specific conditions concerning real estate ("Top-Down" initial approach). Additionally, to cross-check the output of the top-down exercise, a sampling of the most significant assets has been carried out based on their GBV in order to challenge, on an individual basis, the fairness of the third party appraisals provided by Banco Popular ("Bottom-Up" Approach).

Finally, we have considered the adjustments for asset impairment following Banco Popular's liquidation (subordination of balances due from the Bank, etc.).

A summary table setting out the methodology used for the valuation of the 38 entities is shown below:

JV, Subsidiaries & Associates methodological approach (€m)

Associates, Subsidiaries & JV	Industry	Methodology	% Stake	NBV
Alsedá, S.A.	Real Estate	Adjusted Book Value	100%	3,948
Inversiones Inmobiliarias Carnives, S.A.	Real Estate	Adjusted Book Value	100%	2,548
WIZink Bank, S.A.	Banking	Transaction multiples and Price Indication	49%	408
Inversiones Inmobiliarias Alprosa, S.L.	Real Estate	Adjusted Book Value	73%	325
Total Bank	Banking	Transactions multiples and Offer	100%	266
Metrovacesa Suelo y Promoción, S.A.	Real Estate	Capital Increase and multiples	9%	106
Grupo Financiero Ve Por Más S.A. de CV	Banking	Put Option, Third Party Report	25%	101
Eurovida, S.A. (Portugal)	Insurance	Third Party Reports	84%	85
Real Leaf Holding	Real Estate	Book Value	100%	60
Grupo La Toja Hoteles, S.A.	Real Estate	Book Value	90%	59
Compañía Española de Viviendas en Alquiler, S.A.	Real Estate	Market Capitalization	24%	58
Testa Residencial, S.L.U.	Real Estate	Capital Increase and multiples	3%	53
Alsedá Servicios de Gestión Inmobiliaria, S.L.	Real Estate Services	Book Value and Call Option	49%	44
Popular de Participaciones Financieras, S.A.	Holding	Adjusted Book Value	100%	36
Euro Automatic Cash Entidad de Pago, S.L.	Banking	Book Value and transactions multiples	50%	30
Metrovacesa Promoción y Arrendamiento, S.A.	Real Estate	Multiples and Third Party Report	9%	28
Inmobiliaria Vagradá, S.A.	Real Estate	Adjusted Book Value	100%	24
Popular Servicios Financieros E.F.C., S.A.	Banking	Offer Received	100%	22
Aviación Intercontinental, A.I.E	Services	Book Value	35%	19
Pastor Vida, S.A.	Insurance	Third Party Reports	100%	13
Alianz Popular, S.L.	Insurance	Comparable and transaction multiples	40%	11
Pinespa, S.A.	Real Estate	Adjusted Book Value	4%	8
Sociedad Conjunta para la Emisión y Gestión... Ibera Cards, S.A.	Banking	Book Value	43%	5
Salte, S.A.	Real Estate	Book Value	50%	4
Primestar Servicing, S.A.	Real Estate Services	Comparable Multiples	20%	3
Others	Various			6
Total				8,271

(1): Book Value means entities' net asset value based on the latest available financial statements
Source: Data tape as of 31 May 2017, considering the adjustment due to the recapitalisation of Alsedá, Carnives and Alprosa

We have not assumed any specific penalties or price reductions for the liquidation scenario; in practice, this could have a material impact to reflect a number of factors including:

- A liquidator would not offer any representation or warranties;
- Data quality issues;
- Limited number of potential acquirers (especially for joint ventures interests);
- Valuation of real estate investments is based on adjusted book value and any forced-sale adjustment has been considered in the sale of the assets;
- Damage to business proposition following the Bank's liquidation – certain entities rely for a portion of their business on cross referrals from the Bank.

These synergies would be lost following a liquidation of the Bank (e.g. Wizink, Aliseda SGI and Allianz);

- The role of the liquidator is to realise assets which inevitably creates a perception of the Bank as a forced seller.

The impact of including these factors would be to lower recoveries and would not therefore change the overall conclusion of the NCWO analysis.

Outcome of the valuation

JV, Subsidiaries & Associates realisation (€m)

Inv. In Associates, Subsidiaries & JV	NBV (6 June 2017)	Best case	Worst case
On going	8,271	8,382	7,496
Insolvency proceeding	1,627	-	-
Non reconciled difference ⁽¹⁾	10	-	-
Total	9,908	8,382	7,496

(1): €10m difference due to unavailability of data tape as of 6 June 2017
Source: Deloitte analysis

We have calculated a range of €7.5bn to €8.4bn for the estimated realisable value in liquidation for Banco Popular's portfolio of investments in subsidiaries, joint ventures or associates.

Around 66% of this derives from real estate investment entities (primarily Aliseda and Canvives) where the underlying real estate assets have been valued as above.

Of the remaining 34%, ca. 63% of the value has been estimated based on offers or price indications received prior to 6 June 2017. This is on the basis of the assumption noted above that the interested parties would have completed at the original offer level which results in higher recoveries than are likely to be achieved in practice for the reasons noted above.

We have assumed that the 38 entities could be sold in the first 18 months of the liquidation period. Totalbank, Wizink and Popular Servicios Financieros could be arranged in the first 6 months following the Resolution Date.

For entities with negative equity following the contagion exercise above, we concluded they would go into liquidation and there would be no recoveries on the equity investments (this includes Banco Pastor, Popular Banca Privada and Banco Popular Portugal – see section 3.1).

4.5. Intangible assets

Overview of the asset

Intangible assets are mainly comprised of goodwill (derived from the acquisition of Banco Pastor), computer software, customer relationships and trademarks.

On the balance sheet as at 6 June 2017 these were ascribed a value of €1.2bn (NBV).

Intangible NBV (€m)

Intangible Assets	NBV (6 June 2017)
Goodwill	754
Other IA	444
Total	1,198

Source: Banco Popular Individual Financial Statements

Methodological approach and hypothesis explanation

We have considered the following factors, which are relevant to the liquidation scenario:

- Goodwill: We have assumed that under a liquidation scenario, the Bank would lose its banking licence and immediately cease to trade;

- **Trademarks:** cessation of business and the fact of the Banks' liquidation will adversely impact any potential value. While it has been possible in other non-financial liquidation situations to sell on the name, we consider this unlikely in a sector which relies on customer confidence;
- **Computer software:** the liquidator would continue to use this in the liquidation (including existing systems, etc.); extracting value from this would be dependent on potential buyers. As the software is bespoke to the Bank, there are unlikely to be many purchasers as would-be buyers are likely to have their own bespoke software according to the market in which they operate.
- **Customer relationships:** The value of customer relationships is related to a stable customer base (deposits and other related products) on a going concern basis. Considering the Bank would lose its banking licence there would be no ongoing customer base.

Outcome of the valuation

Based on the above, we consider that the outcome in any of the liquidation scenarios would be nil or very small.

4.6. Equity and fixed income assets

Overview

As of 6 June 2017, Banco Popular had an Equity and Fixed Income portfolio of €28,754m classified as follows:

Equity and fixed income NBV (€m)	
Distribution of Portfolio	NBV (6 June 2017)
Financial assets held for trading ⁽¹⁾	501
Available-for-sale financial assets	10,694
Loans and receivables - Fixed Income	654
Held to maturity	6,997
Subtotal	18,846
Investments in subsidiaries, joint ventures and associates ⁽²⁾	9,908
Total	28,754

(1): Financial assets held for trading exclude derivatives of €1,539m, which are analyzed under section 4.7.
 (2): Investments in subsidiaries, joint ventures and associates are considered in chapter 4.4.
 Source: Banco Popular Individual Financial Statements

The composition of each portfolio is detailed as below:

- **Financial assets held for trading.** All financial assets acquired or held for the purpose of selling in the short term or for which there is a recent pattern of short-term profit taking are held for trading.

Financial assets included in this portfolio were valued at their fair value at the reference date.

- **Available-for-sale financial assets.** Including: (i) fixed income that have not been classified as loans and receivables, held to maturity or fair value through profit or loss investments and (ii) equity investments in third party companies not included in the category of fair value through profit or loss:

Available for sale financial assets (€m)	
Distribution of Portfolio	NBV (6 June 2017)
Equity instruments	273
Debt securities	10,419
Total	10,694

Source: Banco Popular Individual Financial Statements

92% of securities classified as available for sale are sovereign and municipal bonds.

Financial assets included in this portfolio were valued at their fair value at the reference date.

- **Loans and receivables - Fixed income.** Including fixed income assets valued at their amortized cost at the reference date, using the effective method interest.
- **Held-to-maturity investments.** Fixed income investments that Banco Popular intended to hold to maturity and did not meet the definition of loans and receivables. This portfolio is entirely composed by sovereign bonds (Spanish, Portuguese and Italian public debt).

Financial assets included in this category were valued at amortised cost at the reference date, using the effective method interest.

The distribution of these financial assets by fair value hierarchy (level 1, level 2 and level 3) is shown below:

**Fair value hierarchy
(€m)**

Distribution of Portfolio	NBV (6 June 2017)
Fixed Income	18,537
Level 1	18,436
Level 2	15
Level 3	86
Equity	309
Level 1	64
Level 2	-
Level 3	245
Total	18,846

Source Banco Popular Fixed income and equity depend Deloitte analysis

This shows that:

- 98% of the portfolio corresponds to Fixed Income (mainly composed by sovereign and municipal bonds) and 2% to Equity;
- 59% of the total fixed income and equity portfolio (€11.2bn) are recorded at fair value (available-for-sale and held for trading);
- The majority of the portfolio elements are liquid and classified as level 1 (€18.5bn or 98% of the total portfolio).

Methodological approach and hypothesis explanation

In order to simulate a liquidation scenario, we considered the liquidator would sell the investments over a reasonable period of time (to avoid flooding the market) and that given the nature of the assets, which are primarily liquid regularly traded quoted investments, fair value as at 6 June 2017 would represent a reasonable proxy for the realisable amount. As such, we considered the hierarchy of market value under IFRS 13:

- Level 1 – financial assets that have quoted prices in active markets. For these instruments, we independently obtained market prices from market information sources such as Bloomberg and Reuters and compared to the prices used in determining the NBV. We considered whether an adjustment would be appropriate to account for liquidity issues in selling the book, but noted that the instruments are all widely traded and the liquidator would be able to exit the positions without distorting the market.
- Level 2 – financial assets that can be valued on the basis of comparable instruments or using methodologies that are based on directly or indirectly observable market data. Banco Popular level 2 assets are considered immaterial (€15m) so the fair value booked by the entity is not adjusted.
- Level 3 – financial assets that can only be valued based on information that is not directly observable market data. Valuation methodologies considered by Banco Popular have been obtained and analysed to consider the rationale and applicability at 6 June 2017.

For the worst case scenario, we have included an additional adjustment of €19m (which represent the 0.1% of every instruments market price) to reflect (inter alia): the uncertainty associated to the market prices considered in the valuation; the uncertainty linked to the valuation models used in those assets classified as Level 3; the uncertainty of the future administrative costs associated to its management and; the uncertainty linked to the operational risk derived from its management. This additional adjustment, for the valuation of every asset valued at fair value, is based on the regulatory framework of prudent valuation under article 105 (14) of Regulation (EU) No 575/2013.

Outcome of the valuation

Equity and fixed income estimated asset realisation (€m)

Distribution of Portfolio	NBV (6 June 2017)	Best case	Worst case
Financial assets held for trading	501	501	500
Available-for-sale financial assets	10,694	10,426	10,415
Loans and receivables - Fixed Income	654	682	681
Held to maturity	6,997	6,681	6,674
Total	18,846	18,290	18,271

Source: Ddotte analysis

The principal differences between book value and the amount estimated to be realised in liquidation (using fair value as a proxy) arise as follows:

- The estimated losses in the Available for Sale portfolio correspond mainly to level 3 assets which fair value has been estimated using the valuer methodologies (consistent with those accepted and commonly used by market participants to determine the market value of these type of instruments), resulting in a lower value.
- Recalculating the fair value amount at 6 June 2017 for assets which are otherwise held on the balance sheet at amortised cost, being Loans and receivables – Fixed Income and Held-to-maturity assets which correspond to level 1 assets (corporate and sovereign bonds).

4.7. Derivatives position

Overview

As of 6 June 2017, the Bank had a derivatives assets portfolio of €1,757m and a derivatives liabilities portfolio of €2,385m classified as follows:

Derivatives NBV (€m)

Distribution of Portfolio (€m)	NBV Assets (6 June 2017)	NBV Liabilities (6 June 2017)
Held for trading derivatives	1,539	1,219
Hedge derivatives	218	808
Fair value	173	782
Cash flows	43	84
Total	1,757	2,383

Source: Banco Popular Individual Financial Statements

Derivatives are included on the balance sheet at fair value and may be further analysed as follows:

- **Held for trading derivatives.** Including those assets and liabilities that are not designated as a hedge accounting tool, including those embedded derivatives separated from of hybrid financial instruments.
- Hedge accounting derivatives. Including:
 - a) **Fair value hedge:** a hedge of the exposure to changes in fair value of a recognized asset or liability or an unrecognized firm commitment, or a

component of any such item, that is attributable to a particular risk and could affect profit or loss.

- b) **Cash flow hedge:** a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognized asset or liability (such as all or some future interest payments on variable-rate debt) or a highly probable forecast transaction, and could affect profit or loss.

The distribution of these financial assets by product is shown below:

Derivatives NBV (€m)

Distribution of Portfolio (€m)	NBV Assets (6 June 2017)	Weight	NBV Liabilities (6 June 2017)	Weight
Held for trading derivatives	1,539		1,519	
IRS	1,108	72%	1,122	74%
Floor	250	23%	327	21%
Others	81	5%	70	5%
Hedge derivatives	218		866	
IRS	159	73%	613	71%
Others	59	27%	253	29%
Total	1,757		2,385	

Source: Derivatives data tape from the Bank

Counterparty credit risk is managed through netting agreements and collateral - based on the information provided, the Credit Value Adjustment (CVA) as of 6 June 2017 was €17.8m.

In terms of collateral, as of 31 May 2017, the amount deposited by Banco Popular against over-the-counter derivatives, was €2,120m (being €352m with Clearing Houses and €1,768m directly with resident and non-resident financial institutions).

Methodological approach and hypothesis explanation

The Bank's declaration of insolvency is likely to be an Event of Default under the relevant ISDA contract that would entitle the non-defaulting party to terminate the contract, with the closeout amount (receipt or payment) being calculated based on values derived at the time (with the detailed methodology being dependent on the version of ISDA Master Agreement used). Where this results in a sum due to the Bank the amount recoverable would be reduced to the extent that there are derivative liabilities to the same counterparty and netting agreements existing, and when applicable, considering collaterals.

However, the amount and timing of any net realisations from derivative contract closeouts may also be subject to considerable legal uncertainty.

This was an area of significant litigation in the Lehman case, centred around Section 2(a)(iii) of the ISDA Master Agreement which seeks to protect a non-defaulting party from increasing its credit exposure to the defaulting party who may be unlikely to perform its obligations to the non-defaulting party, and which resulted in contradictory decisions by the US and English courts. In particular, in four related cases⁶² the English Appeal court determined that an out-of-the-money counterparty might both elect not to terminate a swap and at the same time continue to withhold scheduled payments to the insolvent counterparty until the default is cured, potentially indefinitely. This would reduce the amount of any payment due to zero if

the default is not or cannot be cured and the non-defaulting party elects not to terminate.

In response to these issues, in 2014, ISDA issued a form of amendment which parties could use if they wished to do so, to reverse out some of the effects of 2(a)(iii). However, it has always been the case that parties can add additional terms to or remove terms from a swap, even if it is governed by a Master Agreement, so could effectively contract out of the risk of that scenario if they chose to do so.

The above factors could significantly reduce the amount recoverable from derivative contracts to which the Bank was a party; the, depending on which version of ISDA Master Agreement was used and whether the parties agreed additional terms to the contract amending the impact of 2(a)(iii).

The amount of any adjustment would require significant legal analysis and potentially subjective assumptions on our part. In the circumstances, we have assumed that all contracts contain an equivalent post Lehman amendment negating the issues noted above. We consider this represents a conservative (optimistic) assumption.

As a further simplifying assumption, we have adopted the fair value of derivative assets as a proxy for the amount that the liquidator might be able to realise in liquidation taking into account the effect of netting agreements (where they exist).

In terms of our approach, we obtained an inventory of contracts from the Bank and recalculated the fair value of the derivatives (both assets and liabilities) using methodologies consistent with those accepted and commonly used by market participants to determine the fair value of any derivative financial instrument. We adjusted this taking into account any netting agreements and the net value of the collateral.

Finally, in order to validate the CVA calculation, as indicated in the Article 4 (b) and (e) of the DR 2018/345: we (i) held meetings with management to understand the methodology applied; and (ii) reviewed the methodology approved by the Management. This methodology, explained by the Bank and described in its methodology documentation, is consistent with market practices.

Outcome of the valuation

Based on the analysis performed, we identified no additional adjustment to the fair values on the balance sheet for the derivatives portfolio, neither assets nor liabilities (being the proxy that we adopted to estimate the amount the closeout amount in liquidation).

Derivative liabilities where there are CSA agreements in place and available collateral have been treated as secured liabilities (and would be set-off against the collateral amount), derivative liabilities which are not covered by collateral or netting agreements are treated as ordinary creditors. We would expect additional costs in liquidation based on the close out of the derivatives, and claims from counterparties for termination costs etc., moreover we note the potential significant scope for litigation and delay in recovering any amounts due from counterparties given the legal uncertainties noted above. These have not been modelled but would have the impact of reducing overall recoveries to creditors.

4.8. Costs of liquidation

As previously commented, a liquidation of Banco Popular could be the most complex and difficult insolvency processes ever experienced in Spain. Moreover, we note the inherent uncertainties in estimating the costs of a process which extends over a number of years. This necessarily involves subjective judgements including how stakeholders (staff, customers, service providers, etc.) will behave or situations play out. Significant, lengthy and costly litigation on a variety of issues is inevitable.

In the circumstances our estimates may be conservative (low) possibly by a material amount, and may therefore overstate the likely recovery values.

We have considered the following costs which would arise in a liquidation of the Bank:

- i. Liquidators' fees and costs
- ii. Employee related costs
- iii. Contracts' termination costs
- iv. Operating costs

These would constitute claims against the estate and would have a payment priority ahead of other creditors (see section 3.4 Creditor Hierarchy).

Cost of liquidation estimated realisation (€m)

Costs of Liquidation	18M Scenario		3Y Scenario		7Y Scenario	
	Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
1. Liquidation fees & costs	175	175	175	175	175	175
1.1. Liquidator's fees	148	148	148	148	148	148
1.2. Lawyer's fees	27	27	27	27	27	27
1.3. Procurator's fees	0	0	0	0	0	0
2. Employee related costs	464	464	500	500	534	534
2.1. Remuneration	114	114	140	140	171	171
2.2. Incentives	1	1	4	4	7	7
2.3. Collective dismissals	349	349	356	356	357	357
3. Contract's termination costs	230	230	214	214	182	182
4. Operating costs	120	119	188	187	302	301
Total Costs	990	989	1,078	1,077	1,193	1,192

Source: Deloitte analysis

Note: Procurator's fees have been calculated at the cap level established by the Law (Sole additional provision RDL 5/2010)

Liquidators' fees and costs

These costs include the remuneration received by the liquidator, the Bank's lawyer for the purpose of the insolvency proceedings, and the procurador.

a. Liquidators' fees

We explained the basis of calculation of the liquidators' fees under Spanish Law in section 3.3.1a. We consider that, due to the complexity of the insolvency proceedings, two liquidators would be required. We noted previously that, following recent changes in the law, the maximum period for which the liquidator can draw fees during the liquidation phase would be 18 months. On this basis, our calculation of the costs would be as follows:

Liquidator remuneration cost (€m)

	Remuneration
Common phase	67
Last 6 months' liquidation	40
First 12 months' liquidation	40
Total	148

Source: Deloitte analysis

For this calculation, based on what the Spanish law allows, we have considered:

- Complexity of the insolvency proceeding (additional 25%)

- Cessation of operations (25% less)

Spanish Insolvency Act envisages a Common (or pre-liquidation) phase to consider the options and develop the liquidation plan, etc. Given the complexity and urgency of the Bank's liquidation (in the counterfactual scenario) we consider that this would run in parallel to the liquidation phase and accordingly we have included the costs of this pre-liquidation phase in our overall cost estimates.

The amounts set out above are currently the maximum allowed under the law (regardless of the duration of proceedings or result). Considering the complexity of the case, by international standards, we consider this a very low amount and could require a review of the current legal framework to ensure that the liquidator is properly incentivised.

Accordingly, the estimate above represents a conservative assumption for NCWO purposes.

b. Lawyer's fees

We explained the basis of calculation in section 3.3.1b. Considering this, the lawyer's remuneration would be fixed at a 75% of the individual liquidator's fee, that is, €27m.

c. Procurador's fees

As noted in section 3.3.1c. the maximum amount payable would be €300.000.

i. Employee related costs

We considered the liquidators' staffing requirements for employees assisting the liquidation process and the costs for the collective dismissal process to right size the Bank's operations.

For retained staff, we considered the current levels of remuneration and the operational requirements for the liquidation process. Based on our experience, we consider that some level of incentive payment will have to be paid to retain key individuals, and to facilitate their ongoing cooperation during the liquidation.

This is summarised below:

Employee related cost (€m)

Scenario	Remuneration	Incentive	Collective dismissals	Total costs
18 months	114	1	349	464
3 years	140	4	356	500
7 years	171	7	357	535

Source: Deloitte analysis

a. Remuneration

We estimated the remuneration of workers retained during the liquidation phase, taking into account a payroll average for employees based in branches (ca. €39,800) and those based at headquarters' (ca. €51,500).

b. Incentives

We consider that an incentive calculated at 10% of the base salaries cost would be appropriate in these circumstances to retain key employees needed for the liquidation and an efficient process. This incentive is applied starting in 2018, after the first 6 months of the liquidation process.

c. Collective dismissals

The process under Spanish law to terminate employment contracts was set out in section 3.3.3.

In the context of a liquidation proceeding, the collective dismissal would be phased to eventually cover all employees. This would be set out in the liquidation plan. In all

three liquidation scenarios, most of the dismissals would take place in the first six months following the Bank entering into liquidation. Total costs would depend on the duration of the liquidation.

We have considered workers' seniority, average payrolls and professional categories in arriving at our estimated cost of the collective dismissal process.

iii. Contracts' termination costs

Banco Popular was a party to a large number of different contractual arrangements, including lease and rental agreements (over 1,210 branches). As a result of liquidation, these will no longer be required and the Bank will have to bear the costs of their termination. For the purpose of our analysis we have calculated these as the remaining payments due until the break option or normal date (considering sale and leaseback and ordinary lease agreements conditions), phased over the liquidation period.

We also considered other contractual arrangements, from which we only identified one as material. In particular the IT contract termination costs with IBM, which would result in €18.7m for the 18-month scenario, €13.6m for the 3-year scenario, and €0m for the 7 year-scenario (given that the contract would finish before the end of the liquidation proceeding). Accordingly, the estimated costs of contracts' termination would be:

Scenario	Contract termination cost
18 months	230
3 years	214
7 years	182

Source: Deloitte analysis

Progressively lower contract termination costs in the different scenarios reflects natural run off.

We note that a liquidator would as far as possible seek to reduce the amounts payable; given the above, we do not consider that this would be material to the overall result of our analysis.

iv. Operating costs

We summarised our liquidation hypothesis and strategy to realise value from the assets in section 2.5. The main operating costs during the liquidation period would be the costs derived from common services of branches and real estate assets necessary to wind down operations.

We have assumed that during the liquidation process 60 branches (out of 1,402) and a headquarters' building (Abelias) would remain in use (albeit with reduced staffing levels) to deal with the realisation of assets (including ongoing servicing, claims and other liquidation procedures). Accordingly, we have estimated general expenses (common services, rents of branches, IT, office supplies, Insurance, Security, etc.) during the liquidation period of €120m in the 18-month best case scenario, of €186m in the 3-year best case scenario, of €299m in the 7-year best case scenario.

Mandatorily convertible notes:

Mandatorily convertible notes are financial products which have been the subject of significant litigation in the past few years reflecting the high number of claims received from retail customers.

Based on the report prepared by the head of legal affairs, Management developed a scorecard to assess the eligibility of customers to compensation. Based on this assessment, Banco Popular proposed an agreement to those customers considered eligible. Management have provided for: i) customers who agreed the proposal; ii) customers who rejected the proposal; and iii) customers who did not respond to it.

Management has determined the amount payable to customers who rejected the proposal or not responded to it, considering an 80% loss over the face value on the basis of court rulings. [REDACTED]

[REDACTED] We have estimated two risk scenarios, between [REDACTED] and [REDACTED]. The outcome of these two risk scenarios would be included within the total economic impact ([REDACTED]).

Mortgage loan expenses:

Historically, for all mortgages, banks' customers were required to pay full notary fees and other expenses related to the mortgage origination. Following the Supreme Court ruling of 23 December 2015, customers have made claims against banks for reimbursement of a share of the mortgage loan expense. This is a recent area of conduct mediation and its outcome is still uncertain.⁶³

[REDACTED]

According to the information provided dated on 6 June 2017 the number of existing mortgage loans is [REDACTED]. As at 6 June 2017, [REDACTED] clients had claimed a total amount of [REDACTED].

[REDACTED]

In addition, a rough estimate for the number of judicial expenses is [REDACTED]. Therefore, the total final cost of the litigation proceeding is estimated to be around [REDACTED] this being a rough estimation (including amount claimed and judicial expenses). According to the latest court rulings Banco Popular may be able to limit its liability to litigation expenses. Thus, for the low scenario we estimated a correction of [REDACTED] of the final cost of the litigation proceeding ([REDACTED]):

The final economic impact in the two scenarios considered is between [REDACTED] and [REDACTED].

Capital Increases:

Banco Popular undertook two capital increases, in November 2012 and May 2016, each for €2.5bn (€5bn in aggregate).

⁶³ Vid. Supreme Court Ruling of 28 February 2018.

The Bankia case is precedent for how shareholders might look back to potential errors or omissions in the original capital raise prospectus as grounds for a claim which if successful would allow the shareholder to recover damages against the Bank but as an Ordinary Creditor (thus leapfrogging other more junior creditors) rather than as a shareholder.

Such claims may arise in both the liquidation scenario and in the case of Resolution (indeed we understand that since 6 June 2017 a number of such claims have in fact been received).

The likelihood of such claims succeeding may vary depending on a number of factors including: the period of time elapsed between the date of the capital raise and liquidation/ loss of value of the shares and the perceived sophistication/ knowledge of the underlying investor.

To estimate the potential claims we have considered the following criteria:

- Elapsed time: The first capital increase was carried out on November 12, 2012. The statute of limitations had not expired.
- Investor profile: Based on available public information, and the shareholding structure provided by Banco Popular, which excluded treasury stock, and shares by the board of directors.

- [REDACTED]

Based on the information provided by Banco Popular, we have excluded from the perimeter of potential claims the percentage of shares owned by Banco Popular's Directors involved in the 2012 and 2016 capital increases, reducing the maximum impact by [REDACTED] and [REDACTED] respectively.

[REDACTED]

Based on the above we have estimated a range of [REDACTED] to [REDACTED] for the 2012 Capital Increase and between [REDACTED] and [REDACTED] for 2016 - [REDACTED] to [REDACTED] overall.

We have not considered the impact of any potential claims for interest or costs.

Real Estate development bank guarantees:

Law 57/68, which remained in force until 31 December 2015, required property developers and building cooperatives to take out a bank surety that guaranteed the return of contributions to homebuyers in the event that properties were not built or delivered within the agreed period.

Banco Popular has received numerous legal claims from the customers of property developers and construction companies, as the Bank was jointly and severally liable towards those customers.

The information provided by Banco Popular is as follows (information updated to May 2017):

- The amount of pending judicial proceedings, at the date of the information provided is [REDACTED]
- [REDACTED] of potential risk population that have not claimed yet

Banco Popular's management has estimated a risk of [REDACTED] for promotor bank guarantees. We have assumed that the data provided is correct. Based on our analysis this appears reasonable.

In respect of the distribution of economic impact of floor clauses claims, we estimated a linear impact during the whole liquidation proceeding. It is not possible to know the moment the bank guarantees will be executed.

Outcome of valuation

For the estimate, the provisions made by Banco Popular for the different contingencies described in this analysis have been expressly excluded.

This assumption has been made following the rules of the Spanish Insolvency Act, which establishes a priority for the recognition and payment of credits. Under the equality of credits principle, the payment of the different contingencies would be covered by the Bank's provision by harming the rest of the creditors' position.

The results of our analysis are set out below:

Legal contingencies estimated realisation (€m)

Type of claim	Best case	Worst case
Floor clauses	■	■
Mandatory convertible notes	■	■
Mortgage loan expenses	■	■
Capital increases	■	■
Promotor Bank guarantees	■	■
Total	1,768	3,453

Source: Deloitte analysis

Liquidation proceedings typically result in significant litigation and claims based on hypotheses that are difficult to anticipate in advance.

Sources of uncertainty

The Bank was unable to provide all of the information we requested on these contingent claims, including as noted below:

- No detailed information has been provided regarding the cases excluded from the perimeter evaluated by management, nor the legal basis justifying their exclusion.
- We have had no information on the volume of the expired mortgage loans or related the mortgage loan expenses.
- We have not received any detailed information concerning other potential litigation proceedings (swap, nullity of provisions, multi-currency loans, etc.) Banco Popular consider the amount of this kind of contingencies was not material and did not provision any amount for this regard.

We do not consider that this would affect the overall result for Affected Shareholders and Creditors, the impact would be to increase the level of claims.

5. Estimated assets realisations

Aiming to validate the NCWO principle, we have estimated the asset realisation values for the chosen time scenarios.

From a total asset balance sheet of €126.3m, and in the 18-month scenario, we estimate that the liquidator would be able to recover €95.1bn in the worst case (a 75% from the total balance sheet) and €99.3bn in the best case (a 79% from the total balance sheet).

In a 3-year scenario, we would conclude that the liquidator would recover €97.6bn in the worst case (a 77% from the total balance sheet) and €101.5bn in the best case (an 80% from the total balance sheet).

Finally, in a 7-year scenario, we estimate that the liquidator would be able to realise €100.5bn in the worst case (an 80% from the total balance sheet) and €104.1bn in the best case (an 82% from the total balance sheet).

We set out below the outcome of the analysis showing the estimated realisation value for each type of asset portfolio as well as the estimate on liquidation costs under a hypothetical liquidation proceeding.

Banco Popular legal entity; 18 months, 3 years and 7 years (Cm)

Assets	NBV (6 June 2017)	18M Scenario		3Y Scenario		7Y Scenario	
		Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
Equity, fixed income and derivatives portfolios ⁽¹⁾	21,343	20,410	20,392	20,410	20,392	20,410	20,392
Loans and receivables	83,330	66,521	63,430	68,499	65,660	71,069	68,579
Joint ventures, associates and subsidiaries	9,908	8,382	7,496	8,382	7,496	8,382	7,496
Real Estate assets	3,726	2,514	2,252	2,832	2,624	2,946	2,758
Intangible assets	1,198	-	-	-	-	-	-
Tax assets	5,692	2,334	2,334	2,334	2,334	2,334	2,334
Other assets	1,045	166	166	166	166	166	166
Total insolvency realisation		109,327	98,067	102,624	98,669	103,307	101,722
Liquidation costs		(990)	(989)	(1,078)	(1,077)	(1,193)	(1,192)
Total realisation for shareholders & creditors		99,338	97,078	101,546	97,593	104,114	100,531

(1): Equity, fixed income and derivatives portfolios include cash and cash with the Central Banks totaling €1,334m
Source: Banco Popular Individual Financial Statements; Deloitte analysis

Given the analysis has had to be carried out on a legal entity basis and the debt of the bank with companies within the same group are subordinated to the lowest level of claims (just ahead of equity) in the creditor hierarchy, we have considered the impact of Banco Popular's liquidation on its subsidiaries and on the investments Banco Popular had on them (loans, fixed income, equity and derivatives intra group position) in order to estimate potential recoveries during the liquidation proceeding.

The Net Book Value of Banco Popular as of 6 June 2017 in the intra-group position was €6.8bn (excluding equity investments analysed in section 4.4.), of which we consider that a range between €1.5bn and €1.9bn could be recovered.

Regarding the intra group position with Investees in a liquidation situation, the same as Banco Popular, and with assets greater than €1bn (analysed in section 3.1 and appendix on Banco Popular's investees companies), in the case of Banco Pastor and Banca Privada, we have estimated a recovery outcome of zero (having assessed the three time scenarios and both best and worst approaches). For the investment of the Bank in Banco Popular Portugal, we have calculated a recovery range between 55.7% for the worst case and 76.4% for the best case.

Valuation of difference in treatment - Banco Popular Español

Intra-group position recovery for Banco Popular (Cm)

Assets	NBV (6 June 2017)	18M Scenario		3Y Scenario		7Y Scenario	
		Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
1. Financial assets held for trading							
1.1. Banco Pastor	48	-	-	-	-	-	-
1.2. Banco Portugal	0	0	0	0	0	0	0
1.3. Banca Privada	18	-	-	-	-	-	-
2. Available-for-sale financial assets							
2.1. Intra-group Liquidation	134	-	-	-	-	-	-
3. Loans & receivables							
3.1. Loans at credit institutions							
3.1.1. Banco Pastor	1,561	-	-	-	-	-	-
3.1.2. Banco Portugal	2,162	1,442	1,302	1,532	1,404	1,657	1,544
3.1.3. Banca Privada	358	-	-	-	-	-	-
3.2. Loans at customers							
3.2.1. Intra-group On-going	255	239	178	243	183	247	188
3.2.2. Intra-group Liquidation	2,090	-	-	-	-	-	-
3.3. Fixed income							
3.3.1. Banco Pastor	158	-	-	-	-	-	-
4. Derivatives - Hedge accounting							
4.1. Banca Privada	8	-	-	-	-	-	-
5. Other assets							
5.1. Banco Portugal	1	1	1	1	1	1	1
5.2. Banca Privada	1	-	-	-	-	-	-
5.3. Intra-group On-going	8	8	8	8	8	8	8
5.4. Intra-group Liquidation	7	-	-	-	-	-	-
Total	6,811	3,890	3,489	3,784	3,597	3,913	3,743

Source: Banco Popular's Intra-group data tape; Deloitte analysis

The outcome of the asset realisation from the three main subsidiaries of Banco Popular is presented in the below tables.

Estimated asset realisation for Banco Pastor (Cm)

Assets	NBV (6 June 2017)	18M Scenario		3Y Scenario		7Y Scenario	
		Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
Equity, fixed income and derivatives portfolios	130	100	100	100	100	100	100
Loans and receivables	10,400	4,049	3,924	4,149	4,078	4,297	4,203
Joint ventures, associates and subsidiaries	2	3	2	3	2	3	2
Real Estate assets	127	77	69	87	80	91	85
Intangible assets	171	-	-	-	-	-	-
Tax assets	49	41	41	41	41	41	41
Other assets	8	1	1	1	1	1	1
Total insolvency realisation		4,270	4,136	4,379	4,302	4,532	4,431
Liquidation costs		(107)	(107)	(113)	(113)	(121)	(120)
Total realisation for shareholders & creditors		4,163	4,029	4,267	4,189	4,411	4,311

Source: Banco Popular Individual Financial Statements; Deloitte analysis

Estimated asset realisation for Popular Banca Privada (Cm)

Assets	NBV (6 June 2017)	18M Scenario		3Y Scenario		7Y Scenario	
		Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
Equity, fixed income and derivatives portfolios	483	466	465	466	465	466	465
Loans and receivables	540	111	111	112	111	112	111
Joint ventures, associates and subsidiaries	4	-	-	-	-	-	-
Real Estate assets	2	0	0	1	1	1	1
Intangible assets	-	-	-	-	-	-	-
Tax assets	10	4	4	4	4	4	4
Other assets	14	12	12	12	12	12	12
Total insolvency realisation		593	592	594	592	594	593
Liquidation costs		(22)	(22)	(23)	(23)	(24)	(24)
Total realisation for shareholders & creditors		571	570	571	569	570	569

Source: Banco Popular Individual Financial Statements; Deloitte analysis

Valuation of difference in treatment - Banco Popular Español

Estimated asset realisation for Banco Popular Portugal (€m)

Assets	NBV (6 June 2017)	18M Scenario		3Y Scenario		7Y Scenario	
		Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
Equity, fixed income and derivatives portfolios	1,095	1,056	1,055	1,056	1,055	1,056	1,055
Loans and receivables	6,073	4,743	4,590	4,876	4,735	5,088	4,971
Joint ventures, associates and subsidiaries	19	7	7	7	7	7	7
Real Estate assets	300	179	166	198	186	204	193
Intangible assets	2	-	-	-	-	-	-
Tax assets	76	2	2	2	2	2	2
Other assets	105	17	17	17	17	17	17
Total insolvency realisation		6,004	5,836	6,155	6,002	6,373	6,245
Liquidation costs		(56)	(56)	(66)	(65)	(80)	(80)
Total realisation for shareholders & creditors		5,948	5,780	6,089	5,936	6,293	6,165

Source: Banco Popular Individual Financial Statements; Deloitte analysis

6. Estimated recoveries to shareholders, creditors and Deposit Guarantee Scheme

As noted above, the valuer is required to compare the treatment that shareholders and creditors in respect of which resolution actions have been affected, or the relevant Deposit Guarantee Scheme, would have received had the entity entered into normal insolvency proceedings at the resolution decision date.

Resolution process: actual treatment received

The Affected Shareholders and Creditors following resolution action are set out below, together with their actual shortfalls, summing up to €11.4bn:

Loss of creditors and shareholders under resolution (%; €bn)

Creditors and shareholders	Shortfall
All other creditor	-
Tier 2	100%
Additional Tier 1 Instruments	100%
Shareholders	100%
o/w Equity	100%
Total loss	11,4

Source: Deloitte analysis

The creditors and shareholders of other legal entities suffered no shortfall under resolution and accordingly do not fall within the definition of Affected Shareholders and Creditors.

The Spanish DGS was not called upon in resolution and, therefore, suffered no losses.

Insolvency proceeding of Banco Popular legal entity

As reflected throughout the Report, we have taken three time scenarios (18 month, 3 years and 7 years) for our analysis of Banco Popular legal entity.

In the 18-month scenario, we estimate that the shortfalls for equity and subordinated creditors would reach a total of €20.2bn (a 100% of the creditors' and shareholders' rights), while for the unsecured creditors this shortfall would reach a range between €8.0bn and €14.0bn (33% to 54%) for the best and worst case respectively. In other words, the unsecured creditors are estimated to receive between 46% and 67% of their claim of the Resolution Date, and Affected Shareholders and Creditors would receive nothing.

Estimated shortfalls for Banco Popular – 18 months (€m)

Creditor Hierarchy (18M Scenario)	Liquidation Liabilities (6 June 2017)		Allocation of expected recovery		Shortfall (%)	
	Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
1. Covered creditor	49,901	49,901	49,901	49,901	-	-
o/w ECB	26,700	26,700	26,700	26,700	-	-
2. Credits against the estate	990	989	990	989	-	-
3. General privileged creditors	33,135	33,135	33,135	33,135	-	-
3.1. Taxes	673	673	673	673	-	-
3.2. DGS	26,408	26,408	26,408	26,408	-	-
3.3. Retail Non-covered deposits	6,053	6,053	6,053	6,053	-	-
4. Unsecured creditors	24,346	26,011	16,301	12,042	33%	54%
o/w Legal contingencies	1,788	3,453	1,197	1,598	33%	54%
5. Subordinated creditors	10,777	10,777	-	-	100%	100%
5.1. Subordinated debt	2,041	2,041	-	-	100%	100%
5.2. Interest claims	123	123	-	-	100%	100%
5.3. Fines & Sanctions	1	1	-	-	100%	100%
5.4. Intra-group debt	8,613	8,613	-	-	100%	100%
6. Equity	9,398	9,398	0	0	100%	100%
Total Recovery	128,447	130,212	100,327	96,087		

Source: Banco Popular Individual Financial Statements; Deloitte analysis

In the 3-year scenario, we estimate that the shortfalls for equity and subordinated creditors would reach a total of €20.2bn (a 100% of the creditors' and shareholders' rights), while for the unsecured creditors this shortfall would reach a range between

€5.8bn and €11.5bn (24% to 44%) for the best and worst case respectively. In other words, the unsecured creditors are estimated to receive between 56% and 76% of their claim of the Resolution Date, and Affected Shareholders and Creditors would receive nothing.

**Estimated shortfalls for Banco Popular – 3 years
(€m)**

Creditor Hierarchy (3Y Scenario)	Banco Popular legal entity (6 June 2017)		Allocation of expected realisations		Shortfall (%)	
	Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
1. Covered creditor	49,902	49,902	49,902	49,902	-	-
o/w ECB	26,700	26,700	26,700	26,700	-	-
2. Credits against the estate	1,078	1,077	1,078	1,077	-	-
3. General privileged creditors	33,135	33,135	33,135	33,135	-	-
3.1. Taxes	673	673	673	673	-	-
3.2. DGS	26,408	26,408	26,408	26,408	-	-
3.3. Retail Non-covered deposits	6,053	6,053	6,053	6,053	-	-
4. Unsecured creditors	24,346	26,011	18,509	14,556	24%	44%
o/w Legal contingencies	1,788	3,453	1,359	1,932	24%	44%
5. Subordinated creditors	10,777	10,777	-	-	100%	100%
5.1. Subordinated debt	2,041	2,041	-	-	100%	100%
5.2. Interest claims	123	123	-	-	100%	100%
5.3. Fines & Sanctions	1	1	-	-	100%	100%
5.4 Intra-group debt	8,613	8,613	-	-	100%	100%
6. Equity	9,398	9,398	-	-	100%	100%
Total Recovery	128,635	130,299	102,624	98,669		

Source: Banco Popular Individual Financial Statements; Deloitte analysis

In the 7-year scenario, we estimate that the shortfalls for equity and subordinated creditors would reach a total of €20.2bn (100% of the subordinated creditors' and shareholders' rights), while for the unsecured creditors this shortfall would reach a range between €3.3bn and €8.5bn (13% to 33%) for the best and worst case respectively. In other words, the unsecured creditors are estimated to receive between 67% and 87% of their claim of the Resolution Date, and Affected Shareholders and Creditors would receive nothing.

**Estimated shortfalls for Banco Popular – 7 years
(€m)**

Creditor Hierarchy (7Y Scenario)	Banco Popular legal entity (6 June 2017)		Allocation of expected realisations		Shortfall (%)	
	Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
1. Covered creditor	49,902	49,902	49,902	49,902	-	-
o/w ECB	26,700	26,700	26,700	26,700	-	-
2. Credits against the estate	1,193	1,192	1,193	1,192	-	-
3. General privileged creditors	33,135	33,135	33,135	33,135	-	-
3.1. Taxes	673	673	673	673	-	-
3.2. DGS	26,408	26,408	26,408	26,408	-	-
3.3. Retail Non-covered deposits	6,053	6,053	6,053	6,053	-	-
4. Unsecured creditors	24,346	26,011	21,077	17,494	13%	33%
o/w Legal contingencies	1,788	3,453	1,548	2,322	13%	33%
5. Subordinated creditors	10,777	10,777	-	-	100%	100%
5.1. Subordinated debt	2,041	2,041	-	-	100%	100%
5.2. Interest claims	123	123	-	-	100%	100%
5.3. Fines & Sanctions	1	1	-	-	100%	100%
5.4 Intra-group debt	8,613	8,613	-	-	100%	100%
6. Equity	9,398	9,398	-	-	100%	100%
Total Recovery	128,751	130,415	108,307	101,722		

Source: Banco Popular Individual Financial Statements; Deloitte analysis

Furthermore, we should point out that considering that repayment dates to creditors do not necessarily concur with asset realisation dates, as the former depends on the liquidator's approval and experience shows that there could be material time lapse in between, recovery values for the different liquidation scenarios have not been discounted to consider the time value of money. Nonetheless, should recoveries amounts be discounted as of the date of resolution, this would result in lower amounts than the ones showed in the Report.

Valuation of difference in treatment - Banco Popular Español

We then compare the implied losses to Affected Shareholders and Creditors under the Insolvency counterfactual to their treatment in resolution, as set out below:

Allocation of estimated write-downs for Banco Popular (€m)

Creditor Hierarchy	18M Scenario Write-Down			3Y Scenario Write-Down			7Y Scenario Write-Down		
	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)
1. Covered creditor	-	-	-	-	-	-	-	-	-
o/w ECB	-	-	-	-	-	-	-	-	-
2. Credits against the estate	-	-	-	-	-	-	-	-	-
3. General privileged creditors	-	-	-	-	-	-	-	-	-
3.1. Taxes	-	-	-	-	-	-	-	-	-
3.2. DGS	-	-	-	-	-	-	-	-	-
3.3. Retail Non-covered deposits	-	-	-	-	-	-	-	-	-
4. Unsecured creditors	8,045	13,969	-	5,837	11,455	-	3,269	8,517	-
o/w Legal contingencies	591	1,854	-	429	1,520	-	240	1,131	-
5. Subordinated creditors	10,777	10,777	2,041	10,777	10,777	2,041	10,777	10,777	2,041
5.1. Subordinated debt	2,041	2,041	2,041	2,041	2,041	2,041	2,041	2,041	2,041
5.2. Interest claims	123	123	-	123	123	-	123	123	-
5.3. Fines & Sanctions	1	1	-	1	1	-	1	1	-
5.4 Intra-group debt	8,613	8,613	-	8,613	8,613	-	8,613	8,613	-
6. Equity	9,398	9,398	9,398	9,398	9,398	9,398	9,398	9,398	9,398
Total Write-Down	28,220	34,144	11,439	26,012	31,630	11,439	23,444	28,492	11,439

Source: Deloitte analysis

Insolvency proceedings of other key subsidiaries

However, for the main subsidiaries of Banco Popular (Banco Pastor, Popular Banca Privada, Banco Popular Portugal), the result of the liquidation proceeding would result in additional losses, compared to resolution, for unsecured creditors. The detailed analysis is set out below:

Allocation of estimated write-downs for Banco Pastor (€m)

Creditor Hierarchy	18M Scenario Write-Down			3Y Scenario Write-Down			7Y Scenario Write-Down		
	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)
1. Covered creditor	-	-	-	-	-	-	-	-	-
o/w ECB	-	-	-	-	-	-	-	-	-
2. Credits against the estate	-	-	-	-	-	-	-	-	-
3. General privileged creditors	3,105	3,238	-	3,001	3,121	-	2,856	2,956	-
3.1. Taxes	-	-	-	-	-	-	-	-	-
3.2. DGS	2,030	2,164	-	1,926	2,047	-	1,781	1,882	-
3.3. Retail Non-covered deposits	1,075	1,075	-	1,075	1,075	-	1,075	1,075	-
4. Unsecured creditors	828	828	-	828	828	-	828	828	-
o/w Legal contingencies	-	-	-	-	-	-	-	-	-
5. Subordinated creditors	2,237	2,237	-	2,237	2,237	-	2,237	2,237	-
5.1. Subordinated debt	157	157	-	157	157	-	157	157	-
5.2. Interest claims	10	10	-	10	10	-	10	10	-
5.3. Fines & Sanctions	-	-	-	-	-	-	-	-	-
5.4 Intra-group debt	2,070	2,070	-	2,070	2,070	-	2,070	2,070	-
6. Equity	551	551	-	551	551	-	551	551	-
Total Write-Down	6,720	6,854	-	6,616	6,737	-	6,472	6,573	-

Source: Deloitte analysis

Valuation of difference in treatment - Banco Popular Español

Allocation of estimated write-downs for Banca Popular Privada (€m)

Creditor Hierarchy	18M Scenario Write-Down			3Y Scenario Write-Down			7Y Scenario Write-Down		
	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)
1. Covered creditor o/w ECB	-	-	-	-	-	-	-	-	-
2. Credits against the estate	-	-	-	-	-	-	-	-	-
3. General privileged creditors	-	-	-	-	-	-	-	-	-
3.1. Taxes	-	-	-	-	-	-	-	-	-
3.2. DGS	-	-	-	-	-	-	-	-	-
3.3. Retail Non-covered deposits	-	-	-	-	-	-	-	-	-
4. Unsecured creditors o/w Legal contingencies	10	11	-	10	12	-	11	12	-
5. Subordinated creditors	401	401	-	401	401	-	401	401	-
5.1. Subordinated debt	-	-	-	-	-	-	-	-	-
5.2. Interest claims	4	4	-	4	4	-	4	4	-
5.3. Fines & Sanctions	-	-	-	-	-	-	-	-	-
5.4. Intra-group debt	397	397	-	397	397	-	397	397	-
6. Equity	71	71	-	71	71	-	71	71	-
Total Write-Down	482	484	-	483	484	-	483	484	-

Source: Deloitte analysis

Allocation of estimated write-downs for Banco Popular Portugal (€m)

Creditor Hierarchy	18M Scenario Write-Down			3Y Scenario Write-Down			7Y Scenario Write-Down		
	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)	Liquidation Best case	Liquidation Worst case	Real Case (Resolution)
1. Covered creditor o/w ECB	-	-	-	-	-	-	-	-	-
2. Credits against the estate	-	-	-	-	-	-	-	-	-
3. General privileged creditors	-	-	-	-	-	-	-	-	-
3.1. Taxes	-	-	-	-	-	-	-	-	-
3.2. DGS	-	-	-	-	-	-	-	-	-
3.3. Retail Non-covered deposits	-	-	-	-	-	-	-	-	-
4. Unsecured creditors o/w Legal contingencies	-	-	-	-	-	-	-	-	-
5. Subordinated creditors	929	1,097	-	788	940	-	584	712	-
5.1. Intra-group debt	929	1,097	-	788	940	-	584	712	-
5.2. Subordinated debt	-	-	-	-	-	-	-	-	-
5.3. Interest claims	-	-	-	-	-	-	-	-	-
5.4. Fines & Sanctions	-	-	-	-	-	-	-	-	-
6. Equity	793	793	-	793	793	-	793	793	-
Total Write-Down	1,721	1,869	-	1,580	1,733	-	1,378	1,504	-

Source: Deloitte analysis

The Spanish DGS and covered depositors

This valuation shall also illustrate whether the amount of losses that covered depositors would have suffered under normal insolvency proceedings is greater than the amount of losses that the covered depositors suffered under resolution⁶⁴.

In this regard, we note that the most affected banking subsidiary by the liquidation would be Banco Pastor whose losses would range from equity up to covered depositors, whom, as shown below would suffer losses (between 29% and 35% shortfall, depending on the scenario), making it necessary for the Spanish DGS to intervene.

Estimated losses among deposit entities under Insolvency proceeding (€m)

Covered deposits	NBV (6 June 2017)	18M Scenario Recovery		3Y Scenario Recovery		7Y Scenario Recovery	
		Best Case	Worst Case	Best Case	Worst Case	Best Case	Worst Case
DGS Banco Popular	26,408	-	-	-	-	-	-
DGS Banco Pastor	6,139	2,030	2,164	1,926	2,047	1,781	1,882
DGS Popular Banca Privada	182	-	-	-	-	-	-
DGS Popular Portugal	2,137	-	-	-	-	-	-

Source: Banco Popular Individual Financial Statements; Deloitte analysis

We note that Covered Depositors incurred no losses under the Resolution Scheme.

⁶⁴ Article 74 (2) (a) BRRD

7. Appendix

I: Regulation

English title	Spanish title	Acronym
1. Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council Text with EEA relevance.	1. Directiva 2014/59/UE del Parlamento Europeo Y del Consejo de 15 de mayo de 2014 por la que se establece un marco para la reestructuración y la resolución de entidades de crédito y empresas de servicios de inversión, y por la que se modifican la Directiva 82/891/CEE del Consejo, y las Directivas 2001/24/CE, 2002/47/CE, 2004/25/CE, 2005/56/CE, 2007/36/CE, 2011/35/UE, 2012/30/UE y 2013/36/UE, y los Reglamentos (UE) no 1093/2010 y (UE) no 648/2012 del Parlamento Europeo y del Consejo.	1. BRRD.
2. Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a SRF and amending Regulation (EU) No 1093/2010.	2. Reglamento (UE) nº 806/2014 del Parlamento Europeo y del Consejo, de 15 de julio de 2014, por el que se establecen normas uniformes y un procedimiento uniforme para la resolución de entidades de crédito y de determinadas empresas de servicios de inversión en el marco de un Mecanismo Único de Resolución y un Fondo Único de Resolución y se modifica el Reglamento (UE) nº 1093/2010.	2. SRMR.
3. Treaty on the Functioning of the EU States.	3. Tratado de Funcionamiento de la Unión Europea.	3. TFUE.
4. Act 22/2003, dated 9 July on Insolvency.	4. Ley 22/2003, de 9 de julio, Concursal.	4. Spanish Insolvency Act.
5. Law 11/2015, of 18 June on recovery and resolution of credit institutions and investment services companies in their version prior to revision from 3 December, 2016 to 24 June 2017.	5. Ley 11/2015, de 18 de junio, de recuperación y resolución de entidades de crédito y empresas de servicios de inversión en su versión anterior a la revisión del 03 de diciembre de 2016 al 24 de junio de 2017.	5. Law 11/2015.

English title	Spanish title	Acronym
6. Royal Decree 1012/2015 on recovery and resolution of credit institutions and investment services companies, and amending Royal Decree 2606/1996, of 20 December, on deposit guarantee funds of credit institutions.	6. Real Decreto 1012/2015 por el que se desarrolla la Ley 11/2015, de 18 de junio, de recuperación y resolución de entidades de crédito y empresas de servicios de inversión, y por el que se modifica el Real Decreto 2606/1996, de 20 de diciembre, sobre fondos de garantía de depósitos de entidades de crédito.	6. RD 1012/2015.
7. Law 10/2014 on the management, supervision and solvency of credit entities.	7. Ley 10/2014, de 26 de junio, de ordenación, supervisión y solvencia de entidades de crédito.	7. Law 10/2014.
8. Royal Decree 84/2015, of 13 February, which develops the Law 10/2014 on the management, supervision and solvency of credit entities.	8. Real Decreto 84/2015, de 13 de febrero, por el que se desarrolla la Ley 10/2014, de 26 de junio, de ordenación, supervisión y solvencia de entidades de crédito.	8. RD 84/2015.
9. Law 39/2015, of 1 October, of the Common Administrative Procedure of Public Administrations.	9. Ley 39/2015, de 1 de octubre, del Procedimiento Administrativo Común de las Administraciones Públicas.	9. Law 39/2015.
10. Law 29/1998, of 13 July, regulating the Contentious-Administrative Jurisdiction (revision of April 22, 2016).	10. Ley 29/1998, de 13 de julio, reguladora de la Jurisdicción Contencioso-administrativa.	10. Law 29/1998.
11. Royal Legislative Decree 2/2015, of 23 October, approving the consolidated text of the Law on the Workers' Statute.	11. Real Decreto Legislativo 2/2015, de 23 de octubre, por el que se aprueba el texto refundido de la Ley del Estatuto de los Trabajadores.	11. RLD 2/2015.
12. Law 36/2011, of 10 October, regulating social jurisdiction.	12. Ley 36/2011, de 10 de octubre, reguladora de la Jurisdicción Social.	12. Law 36/2011.
13. Act 2/1981, dated 25 March, on Regulation of the Mortgage Market, as well as the regulatory norms of other securities or instruments that are legally attributed the same solvency regime as that applicable to mortgage certificates.	13. Ley 2/1981, de 25 de marzo, de Regulación del Mercado Hipotecario, así como las normas reguladoras de otros valores o instrumentos a los que legalmente se atribuya el mismo régimen de solvencia que el aplicable a las cédulas hipotecarias.	13. Act 2/1981.

English title	Spanish title	Acronym
14. Royal Decree Law 3/1993, dated 26 February, on urgent measures in budgetary, tax, financial and employment matters.	14. Real Decreto Ley 3/1993, de 26 de febrero, sobre medidas urgentes en materias presupuestarias, tributarias, financieras y de empleo.	14. RLD 3/1993.
15. Act 5/2015, dated 27 April, on promoting business financing.	15. Ley 5/2015, de 27 de abril de fomento de la financiación empresarial.	15. Act 5/2015.
16. Act 24/1988, dated 28 July, on the Stock Market, with regard to the regime applicable to the clearing and liquidation systems regulated thereby, and the entities participating in those systems.	16. Ley 24/1988, de 28 de julio, del Mercado de Valores, en lo que respecta al régimen aplicable al sistema de compensación, liquidación y registro en ella regulados, y a las entidades participantes en dichos sistemas.	16. Act 24/1988.
17. Royal Legislative Decree 4/2015, of 23 October, approving the consolidated text of the Securities Market Law (Revision of 27 May, 2017).	17. Real Decreto Legislativo 4/2015, de 23 de octubre, por el que se aprueba el texto refundido de la Ley del Mercado de Valores (Revisión del 27 de mayo de 2017).	17. RLD 4/2015.
18. Act 13/1994, dated 1 June on Autonomy of the Bank of Spain.	18. Ley 13/1994, de 1 junio, de Autonomía del Banco de España.	18. Act 13/1994.
19. Act 1/1999, dated 5 January, on regulation of capital risk companies and their management firms.	19. Ley 1/1999, de 5 de enero, reguladora de las entidades de capital-riesgo y de sus sociedades gestoras.	19. Act 1/1999.
20. Act 41/1999, dated 12 November, on payment systems and the settlement systems of securities.	20. Ley 41/1999, de 12 de noviembre, sobre sistemas de pagos y de liquidación de valores.	20. Act 41/1999.
21. Royal Decree Law 5/2005, dated 11 March, on urgent reforms to boost productivity and improve public contracting.	21. Real Decreto Ley 5/2005, de 11 de marzo, de reformas urgentes para el impulso a la productividad y para la mejora de la contratación pública.	21. RLD 5/2005.
22. Act 6/2005, dated 22 April, on Restructuring and Winding-up of Credit Institutions.	22. Ley 6/2005, de 22 de abril, sobre Saneamiento y Liquidación de las Entidades de Crédito.	22. Act 6/2005.
23. Act 14/2013, dated 27 September, on supporting entrepreneurs and their internationalization.	23. Ley 14/2013, de 27 de septiembre, de apoyo a los emprendedores y su internacionalización.	23. Act 14/2013.

English title	Spanish title	Acronym
24. Act 20/2015, dated 14 July, on the ordering supervision and solvency of insurance and re-insurance entities; and the Consolidated Text of the Legal Statute of the Insurance Consortium, approved by Royal Legislative Decree 7/2004, dated 29 October.	24. Ley 20/2015, de 14 de julio, de ordenación, supervisión y solvencia de entidades aseguradoras y reaseguradoras; y el texto refundido del Estatuto Legal del Consorcio de Compensación de Seguros, aprobado por el Real Decreto Legislativo 7/2004 de, 29 de octubre.	24. Act 20/2015.
25. Act 11/2015, dated 18 June, on recovery and resolution of Credit institutions and firms of investment services.	25. Ley 11/2015, de 18 de junio, de recuperación y resolución de entidades de crédito y empresas de servicios de inversión.	25. Act 11/2015.
26. Act 35/2003, dated 4 November, on Collective Investment Institutions.	26. Ley 35/2003, de 4 de noviembre, de Instituciones de Inversión Colectiva.	26. Act 35/2003.
27. Act 22/2014, dated 12 November, regulating venture capital entities, other closed-end collective investment undertakings and closed-ended collective investment companies for which Act 35/2003, dated 4 November, on Collective Investment Institutions is modified.	27. Ley 22/2014, de 12 de noviembre, por la que se regulan las entidades de capital-riesgo, otras entidades de inversión colectiva de tipo cerrado y las sociedades gestoras de entidades de inversión colectiva de tipo cerrado, y por la que se modifica la Ley 35/2003, de 4 de noviembre, de Instituciones de Inversión Colectiva.	27. Act 22/2014.
28. The Consolidated Text of the Law on the Regulation of Plans and Pension Funds, approved by Royal Legislative Decree 1/2002, dated 29 November.	28. El Texto Refundido de la Ley de Regulación de los Planes y Fondos de Pensiones, aprobado por Real Decreto Legislativo 1/2002, de 29 de noviembre	28. Law on the Regulation of Plans and Pension Funds.
29. Código da Insolvência y da Recuperação de Empresas, Law Decree 53/2004, 18 March.	29. Código da Insolvência e da Recuperação de Empresas, Decreto Legislativo 53/2004, de 18 de Marzo.	29. Código da Insolvência y da Recuperação de Empresas.
30. Chapter 7 of the Bankruptcy Code.	30. Capítulo 7 del Código de Insolvencia.	30. Chapter 7 of the Bankruptcy Code.
31. Law 25/2015, of 28 July on second chance mechanism, reduction of the financial burden and other measures of social order.	31. Ley 25/2015, de 28 de julio, de mecanismo de segunda oportunidad, reducción de la carga financiera y otras medidas de orden social.	31. Law 25/2015.

English title	Spanish title	Acronym
32. Law 57/1968, of 27 July, on perceiving of anticipated quantities in the construction and sale of houses (Repealed Disposition).	32. Ley 57/1968, de 27 de julio, sobre percibo de cantidades anticipadas en la construcción y venta de viviendas (Disposición derogada)	32. Law 57/1968.
33. Circular 4/2017, of 27 November, of the Bank of Spain, to credit institutions, on norms of public and reserved financial information, and models of financial states (BOE of 6 December 2017).	33. Circular 4/2017, de 27 de noviembre, del Banco de España, a entidades de crédito, sobre normas de información financiera pública y reservada, y modelos de estados financieros (BOE de 6 de diciembre de 2017).	33. Circular 4/2017 of Bank of Spain.
34. Circular 4/2016, of 27 April, of the Bank of Spain, by which Circular 4/2004, of 22 December, is modified to credit institutions, on rules of public and reserved financial information and models of financial statements, and Circular 1/2013, of 24 May, on the Risk Information Center. (BOE of 6 May).	34. Circular 4/2016, de 27 de abril, del Banco de España, por la que se modifican la Circular 4/2004, de 22 de diciembre, a entidades de crédito, sobre normas de información financiera pública y reservada y modelos de estados financieros, y la Circular 1/2013, de 24 de mayo, sobre la Central de Información de Riesgos. (BOE de 6 de mayo).	34. Circular 4/2016 of Bank of Spain.
35. Royal Decree 742/2016, of 30 December, which establishes the minimum interprofessional salary for 2017.	35. Real Decreto 742/2016, de 30 de diciembre, por el que se fija el salario mínimo interprofesional para 2017.	35. RD 742/2016.
36. Real Decree 1373/2003, of 7 November, by which approves the tariff of rights of the procurador of the courts.	36. Real Decreto 1373/2003, de 7 de noviembre, por el que se aprueba el arancel de derechos de los procuradores de los tribunales.	36. RD 1373/2003.
37. Royal Decree-Law 5/2010, of 31 March, by which extends the validity of certain economic measures of temporary character.	37. Real Decreto-ley 5/2010, de 31 de marzo, por el que se amplía la vigencia de determinadas medidas económicas de carácter temporal.	37. RDL 5/2010.
38. Royal Decree of 22 August, 1885 by which the Code of Commerce is published.	38. Real Decreto de 22 de agosto de 1885 por el que se publica el Código de Comercio.	38. Commercial Code.

English title	Spanish title	Acronym
39. Royal Decree 1860/2004, of 6 September, by which establishes the tariff of rights of the insolvency administrators.	39. Real Decreto 1860/2004, de 6 de septiembre, por el que se establece el arancel de derechos de los administradores concursales.	39. RD 1860/2004.
40. Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.	40. Reglamento (UE) no 575/2013 del Parlamento Europeo y del Consejo, de 26 de junio de 2013, sobre requisitos prudenciales para las entidades de crédito y las empresas de inversión, y por el que se modifica el Reglamento (UE) no 648/2012.	40. Regulation Nº 575/2013.
41. EBA/RTS/2017/06 - Final draft RTS on valuation after resolution (23 May 2017).	41. EBA/RTS/2017/06- Proyecto Final RTS de valoración posterior a la resolución (23 de Mayo de 2017).	41. EBA RTS.
42. Royal Decree-Law 1/2017, of 20 January, of urgent measures of protection of consumers in matter of floor clauses.	42. Real Decreto-ley 1/2017, de 20 de enero, de medidas urgentes de protección de consumidores en materia de cláusulas suelo.	42. RDL 1/2017.
43. Commission Delegated Regulation (EU) 2018/344 of 14 November 2017 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the criteria relating to the methodologies for valuation of difference in treatment in resolution.	43. Reglamento Delegado (UE) 2018/344 de la Comisión de 14 de noviembre de 2017 por el que se complementa la Directiva 2014/59/UE del Parlamento Europeo y del Consejo en lo que respecta a las normas técnicas de regulación que especifican los criterios relativos al método para la valoración de la diferencia en el trato en caso de resolución.	43. DR (EU) 2018/344.

II: Banco Popular Portugal legal framework

The legal proceeding applicable in Portugal to the winding up of a bank is scattered through several laws. The main Portuguese legislation that constitutes this legal framework is the following:

- i. The winding up of credit institutions and financial companies having their head office in Portugal and of any of their branches located in another Member-State of the European Union (EU), which is set forth in Decree-Law no. 199/2006, of 25 October ("Banking Winding up Regime")⁶⁵;
- ii. The "Portuguese Legal Framework of Credit Institutions and Financial Companies" (specifically, on Title VIII) approved by Decree-Law no. 298/92, of 31 December ("RGICSF")⁶⁶;
- iii. The Portuguese Insolvency and Corporate Recovery Code, approved by Decree-Law no. 53/2004, of 18 March ("CIRE")⁶⁷; and
- iv. The Portuguese Commercial Companies Act, approved by Decree-Law no. 262/86, of 02 September ("CSC")⁶⁸.

Essentially, the legal proceeding applicable to the winding up of a bank in Portugal follows the legal provisions applicable to the liquidation of an insolvent commercial company, as set forth in the CIRE⁶⁹ (a judicial winding up proceeding) or, eventually, in the CSC (if there is a voluntary non-judicial winding up), adapted to the specific provisions set forth in the Banking Winding up Regime and in the RGICSF.

Also relevant to this systematic description of the legal framework is to mention that:

- (i) The legal framework governing the recovery of commercial companies and the protection of creditors set forth in Titles IX and X of CIRE does not apply to credit institutions (article 153-A of the RGICSF); and that
- (ii) The Banking Winding up Regime does not cover the reorganization measures⁷⁰ applicable to credit institutions and financial companies having their head office in Portugal, nor the rules applicable to the

⁶⁵ The Banking Winding up Regime has been amended by Decree-Law no. 31-A/2012, of 10 February and by Law no. 23-A/2015, of 27 March. The latter has transposed into Portuguese Law the Directives 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes, and 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms, amending among other acts, the RGICSF and the Portuguese Securities Code.

⁶⁶ The RGICSF has been amended extensively since its original version (48 amendments), and was last amended by Law no. 109/2017, of 24 November 2017.

⁶⁷ Last amended by Rectification no. 21/2017, of 25 August 2017.

⁶⁸ Last amended by Rectification no. 21/2017, of 25 August 2017.

⁶⁹ Save for Title I of CIRE, which has little or no application whatsoever in the winding up a credit institution.

⁷⁰ Reorganisation measures consist of measures which are intended to preserve or restore the financial situation of a credit institution or of a financial company and which could affect third parties' pre-existing rights, including measures involving a suspension of payments, suspension of enforcement measures or reduction of claims (article 2 of the Banking Winding up Regime).

recovery and resolution of certain financial companies and financial holding companies⁷¹ and investment firms⁷².

There are several phases in insolvency proceedings under the Portuguese Insolvency Act as set out below.

2.1.2.1.1. Judicial Winding up Proceeding

Differently from the application of corrective, recovery and resolution measures, the main objective of a bank winding up proceeding is to identify and to realise the assets in order distribute proceeds to among creditors, under the supervision of the Bank of Portugal.

Ultimately, once it is verified that the application of corrective, recovery and resolution measures set forth in RGICSF are not sufficient to recover a failing bank, cannot achieve or have already achieved pre-defined resolution objectives, the justification for maintaining the application of such measures no longer exists.

As a result of that verification, the authorisation to carry out banking and investment activities must be withdrawn by the Bank of Portugal⁷³, the credit institution is to be wound up and the liquidation procedure is triggered, following the procedure set forth in the Banking Winding up Regime and, on a subsidiary basis, the liquidation rules set forth in the CIRE⁷⁴ (articles 5 and 8 of the Banking Winding up Regime and article 22 of the RGICSF).

A withdrawal of a bank's authorisation is the sole responsibility of the Bank of Portugal and is the equivalent in effect to a declaration of insolvency⁷⁵. The Bank of Portugal's decision to withdraw the banks' license must indicate the hour of the day

⁷¹ The entities referred to in article 152/1 of RGICSF, and are:

- (a) financial institutions which are subsidiaries of a credit institution, an investment firm carrying out the activities provided for in article 199-A(1)(c) or (f), except for the placement of financial instruments without a firm commitment basis, or of one of the entities referred to in the following paragraphs, and are covered by the consolidated supervision of the parent undertaking;
- (b) financial holding companies, mixed financial holding companies and mixed-activity holding companies; and
- (c) parent financial holding companies in Portugal and parent mixed financial holding companies in Portugal

⁷² Namely the investment firms which, except for the placement of financial instruments without a firm commitment basis, carry out the following investment activities (articles 199-I/2 of RGICSF *ex vi* article 1/3 of the Banking Winding up Regime): (i) dealing on own account in one or more of the financial instruments listed in Section C of Annex I to Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004; or (ii) underwriting of financial instruments and placement, on a firm commitment basis or without a firm commitment basis, of the financial instruments listed in Section C of Annex I to Directive 2004/39/EC.

⁷³ Articles 22 and 23 of the RGICSF.

⁷⁴ There are two exceptions to this general rule, where the winding up and liquidation may be waived by the Bank of Portugal (article 22/1, d, i and 5 of RGICSF), namely if:

- (i) the credit institution ceases or reduces its activity to a negligible level for a period over 6 months;
- (ii) the credit institution expressly gives up the authorisation to carry out its banking activity.

⁷⁵ Article 8/2 of the Banking Winding up Regime.

of when it has been taken, and that time will count as the beginning of the winding up proceeding⁷⁶.

A notice of the aforementioned decision to withdraw the banking license has to be given to the credit institution and communicated to the EBA, as well as to the supervisory authorities of the EU Member-States in which the credit institution has branches or provides services⁷⁷.

Simultaneously, the Bank of Portugal must give public notice of the withdrawal decision and has to take the necessary steps to ensure the immediate closure of the institution's premises, which will remain closed until the liquidators have taken office⁷⁸.

In short, the provisions set forth in CIRE governing the treatment of the insolvent's assets subject to administration, the ranking of claims and the effects of the declaration of insolvency (which in a bank corresponds to the withdrawal of a banking license) are, with certain modifications, applicable in a winding up proceeding of a credit institution.

Regarding the administration and liquidation of the insolvent bank's assets and the payments to creditors, the rules set forth in CIRE are, in most part, fully applicable.

We cannot exclude that other relevant provisions set forth in CIRE and in several exceptional regimes set forth in Portuguese law can have significant implications and a material impact in the winding up of a bank. These include, among others:

- i. Portuguese rules applicable to the calculation of interest rates and default interests;
- ii. The legal requirements for netting of credits and debts between the bank and its creditors as set forth in CIRE and in the Portuguese Civil Code;
- iii. Portuguese rules applicable to reckless mismanagement and culpable insolvency;
- iv. Credits as a result of a suspensive event; as well as
- v. Other exceptional regimes which bypass insolvency and winding up rules such as settlement finality in payment and securities settlement systems and the rules on financial collateral arrangements.

1.2.1.2.2. Insolvency

CIRE distinguishes between four categories of credits: guaranteed, privileged, common and subordinated credits.

The aforementioned categories of credits can be described as follows:

- i. Guaranteed or secured credits are those secured by a guarantee in rem. They are paid out of the proceeds of the sale of the secured asset once sale expenses and any amount allocated to credits over the insolvency estate are deducted. If the secured assets are insufficient to pay all debts owed to guaranteed creditors, any remaining debt is included in the common credits;
- ii. Privileged or preferential credits are those benefiting from general creditor's privilege (e.g. credits arising from an employment contract) over assets

⁷⁶ Article 5/3 of the Banking Winding up Proceeding.

⁷⁷ Even though our analysis is not covering the application of resolution measures, it should be noted that the withdrawal of the authorisation granted to a credit institution having its head office in Portugal, which is a subsidiary of a crossborder group or the parent undertaking of a cross-border group must comply with the common European Resolution and Recovery provisions¹⁷ before any wound up procedures can be triggered in Portugal.

⁷⁸ Article 23 of the RGICSF.

comprised in the insolvent estate. Due to their nature, these credits are paid in a pro rata basis with the proceeds of the unsecured assets and according to its inner ranking. In Portuguese Law there are several types of privileged creditors that are ranked differently;

- iii. Common or non-secured creditors can only be paid after creditors who rank in priority to them are paid in full. They are paid in a pro rata basis if the proceeds of the insolvency estate are insufficient to fully satisfy the debt;
- iv. Subordinated creditors⁷⁹ rank below common creditors. They follow the same pro rata rules applicable to common creditors. Holders of such credits are not entitled to vote at the General Meeting of Creditors save for approving an insolvency plan.

3. Credit institutions

As already explained in our analysis to the legal proceeding that needs to be followed in order to liquidate a bank, when a credit institution with its head office in Portugal is failing or likely to fail, the rules governing the recovery of commercial undertakings and the protection of creditors set forth in CIRE do not apply to credit institutions (article 153-A of RGICSF).

Instead, in order to safeguard the financial soundness of a credit institution, the interests of depositors or the stability of the financial system, provided that certain

⁷⁹ In respect to the order by which payments are made among credit classes, Article 177 of CIRE establishes that subordinated credits should be paid in last, i.e., after all claims of common to non-secured credits have been paid.

In respect to the payment hierarchy within the class subordinated credits, if there are still any amounts left to distribute from the liquidation of the insolvent estate, as a **general rule** the payment of holders of subordinated credits takes place in the following order (Article 48 ex vi article 177 of CIRE):

1. Credits held by "persons specially related to the insolvent", provided that such a relationship already existed when the credit was acquired. Such credits held by persons specially related to the debtor also include the ones that have been assigned to other entities in the first 2 years prior to the beginning of the insolvency proceeding.

A list of "persons specially related to the insolvent" is set forth in article 49 of CIRE. These are for example, family members, partners, associates, other companies in a group relationship with the insolvent party or that have control over it. However, CIRE allows the interested part the proof of the contrary.
2. Interest on non-subordinated credits that have arose after the declaration of insolvency, except fort interests of credits which are preferential in general or secured in re, up to the value of the respective assets;
3. Contractually subordinated credits;
4. Credits which require the insolvent to fulfill gratuitous obligations;
5. Credits over the insolvent estate, which as a result of being terminated to the benefit of the insolvent estate, are now being held by non *bona fide* third parties;
6. Interest on subordinated credits that have arose after the declaration of insolvency;
7. Shareholder's loans.

An **exception** to this general rule is the possibility of a different hierarchy of payment being established by parties in a contract, as set forth in Article 177/2 of CIRE (e.g. under the payment terms and conditions to bond holders set forth in a private placement memorandum).

conditions, objectives and legal requirements are met the Bank of Portugal may intervene in such an entity through:

- i. The application of corrective and reorganization measures, including, among others, the submission of a restructuring plan, the interim administration of the credit institution, restrictions to the granting of credit and to the deposit taking activities (articles 141-145-B of RGICSF);
- ii. The application, within the Single Resolution Mechanism²⁸, of the following recovery and resolution measures, pursuant to Chapter III of Title VIII of RGICSF:
 - The partial or total sale of the bank's business;
 - The partial or total transfer of the business to bridge institutions;
 - Separation and partial or total transfer of the business to asset management vehicles;
 - Bail-in.

Whenever the corrective measures applied do not achieve the financial recovery of the credit institution, or if they are deemed insufficient, the Bank of Portugal may, alternatively²⁹:

- i. Suspend or remove the members of the management body and appoint temporary members for the management body;
- ii. Apply a resolution measure, if deemed necessary to fulfil the objectives set out in article 145-C of RGICSF and if the requirements laid down in article 145-E(2) are met;
- iii. Withdraw the bank's authorisation, applying the liquidation regime provided for in the applicable law.

The process of liquidation will be carried out following to the rules of CIRE, to the extent that such rules do not conflict with the Banking Law and of the Banking Winding up Regime (article 9/3 of the Banking Winding up Regime).

The revocation by the Bank of Portugal produces the same effects as the declaration of insolvency and the provisions of the Insolvency Code will apply, provided that such provisions do not conflict with the Banking Law and LLCIFC⁸⁰ to the liquidation of Credit Institutions.

⁸⁰ Law on Liquidation of Credit Institutions and Financial Companies - DL 199/2006 of 25 October, 2006 - which implemented Directive 2001/24/CE of the European Parliament and Council of 4 April, 2001 into the Portuguese jurisdiction.

III: Banco Popular's investees

Impact of Banco Popular liquidation over its investees companies (I/II)

Entity	BPE's Direct Share (%)	BPE's Indirect Share (%)	Liquidation perimeter's
Banco Popular Español, S.A.			Insolvency proceeding
Banco Pastor, S.A.U.	100%	0%	Insolvency proceeding
Banco Popular Portugal, S.A.	100%	0%	Insolvency proceeding
Alseda, S.A.	100%	0%	On-going
IM Grupo Banco Popular Empresas VII, FTA	100%	0%	Insolvency proceeding
Inversiones Inmobiliarias Canyves, S.A.	100%	0%	On-going
TotalBank	100%	0%	On-going
IM Grupo Banco Popular Leasing 3, FT	100%	0%	Insolvency proceeding
Popular Banca Privada, S.A.	93%	8%	Insolvency proceeding
Eurovida, S.A. (Portugal)	84%	16%	On-going
IM Grupo Banco Popular MBS 3, FTA	100%	0%	Insolvency proceeding
IM Grupo Banco Popular Empresas VI, FTA	100%	0%	Insolvency proceeding
BPE Financiaciones, S.A.	90%	10%	Insolvency proceeding
Consulteam Consultores de Gestao, Lda	86%	14%	Insolvency proceeding
IM Grupo Banco Popular Condomo 1, FT	100%	0%	Insolvency proceeding
IM Banco Popular MBS 2, FTA	100%	0%	Insolvency proceeding
Inversiones Inmobiliarias Alprosa, S.L.	73%	27%	On-going
Isla de los Buques, S.A.	100%	0%	Insolvency proceeding
Gestión de Activos Castellana 40, S.L.	100%	0%	Insolvency proceeding
Taller Real Estate, S.L.	100%	0%	Insolvency proceeding
Platja Ampliaris, S.L.	100%	0%	Insolvency proceeding
Popular Servicios Financieros E.F.C., S.A.	100%	0%	On-going
Pastor Vida, S.A.	100%	0%	On-going
Vilamar Gestion, S.L.	0%	100%	Insolvency proceeding
Inmobiliaria Viagrada, S.A.	100%	0%	On-going
Hercepopular S.L.	0%	51%	On-going
Popular Capital, S.A.	90%	10%	Insolvency proceeding
Read Leaf Holding	100%	0%	On-going
Popular de Renting, S.A.	100%	0%	On-going
Grupo La Toja Hoteles, S.A.	90%	0%	On-going
Inversiones Inmobiliarias Tamadaba, S.A.	100%	0%	Insolvency proceeding
GC FTPYME Pastor 4	100%	0%	Insolvency proceeding
Tiffany Investments, S.L.	100%	0%	On-going
Inversiones Inmobiliarias Cedaceros, S.A.	0%	100%	On-going
General de Terrenos y Edificios, S.L.	100%	0%	Insolvency proceeding
Popular de Participaciones Financieras, S.A.	100%	0%	On-going
Velázquez, 34, S.A.	98%	2%	Insolvency proceeding
Pandatan, S.L.	100%	0%	Insolvency proceeding
Corporación Financiera ISSOS, S.L.	100%	0%	Insolvency proceeding
Manberor, S.A.	0%	100%	On-going
Sobrinos de Jose Pastor Inversiones, S.A.	100%	0%	Insolvency proceeding
EDT FTPYME Pastor 3	100%	0%	Insolvency proceeding
Gestora Popular, S.A.	35%	65%	Insolvency proceeding
Inversiones Inmobiliarias Jeragullas, S.A.	0%	100%	On-going
Popular Seguros, S.A.	0%	100%	On-going
Inversiones Inmobiliarias Gercebio, S.A.	0%	100%	On-going
Urbanizadora Española, S.A.	7%	91%	Insolvency proceeding
Gestora Europea de Inversiones, S.A.	100%	0%	Insolvency proceeding
Finespa, S.A.	4%	96%	On-going
Popular Gestión Privada SGIIC, S.A.	0%	100%	Insolvency proceeding
Pastor Participaciones Preferentes, S.A.	100%	0%	Insolvency proceeding
Popular de Mediación, S.A.	100%	0%	Insolvency proceeding
Intermediación y Servicios Tecnológicos, S.A.	100%	1%	Insolvency proceeding
Popular Balsa S.V., S.A.	100%	0%	Insolvency proceeding
General de Terrenos y Edificios Servicios Integrales, S.L.	0%	100%	Insolvency proceeding
Cerebalo Assets, S.L.	100%	0%	Insolvency proceeding
Pastor Privada Investment 2, S.L.	100%	0%	Insolvency proceeding
Gestora Inmobiliaria La Toja, S.A.	90%	10%	On-going
Popular Gestao de Activos, S.A.	100%	0%	Insolvency proceeding
Gold Leaf Title Company	0%	100%	On-going
Martha Golf, S.L.	0%	100%	Insolvency proceeding
Promoción Social de Viviendas, S.A.	0%	92%	On-going

Valuation of difference in treatment - Banco Popular Español

Impact of Banco Popular liquidation over its investees companies (II/II)

Entity	BPE's Direct Share (%)	BPE's Indirect Share (%)	Liquidation perimeter's
Cantera de Albanilla, S.L.	0%	100%	On-going
Pastor Privada Investment 1, S.L.	0%	50%	On-going
Popular Operaciones	100%	0%	Insolvency proceeding
Pastor Privada Investment 3, S.L.	0%	33%	On-going
BPP Asesores, S.A.	50%	50%	Insolvency proceeding
BPE Representações y Participações, L.T.D.A.	100%	0%	On-going
Alseda Real Estate, S.A.	100%	0%	On-going
Eagle Hispania, S.L.	0%	100%	On-going
Popular Consumer Finance, S.A.	100%	0%	Insolvency proceeding
Edificaciones Nimec, S.L.	0%	100%	Insolvency proceeding
Meglahe, S.A.	0%	100%	On-going
Alseda Participaciones Inmobiliarias, S.A.	0%	100%	On-going
Popular Español Asia Trade, L.T.D.	100%	0%	On-going
Int'l Entertainment	0%	100%	Insolvency proceeding
Popularcompras, S.L.U.	100%	0%	On-going
Inversiones Inmobiliarias Linara	0%	100%	On-going
Inversiones Inmobiliarias Inagua	0%	100%	On-going
Inversiones Inmobiliarias Tamdab	0%	100%	On-going
Inversiones Inmobiliarias Valabla	0%	100%	On-going
Inversiones Inmobiliarias Elenca	0%	100%	On-going
Inversiones Inmobiliarias Popsol	0%	100%	On-going
Limatesa Gestion de Servicios Integrales, S.L.	100%	0%	On-going
Inverkur Aguilas I, S.L.	0%	50%	On-going
Inverkur Aguilas II, S.L.	0%	50%	On-going
Iberia Cards, S.A.	43%	0%	On-going
Alseda Servicios de Gestión Inmobiliaria, S.L.	49%	0%	On-going
WIZink Bank, S.A.	49%	0%	On-going
FIB Realty Corporation	0%	100%	On-going
Primestar Servicing, S.A.	20%	0%	On-going
Total Sunset INC	0%	100%	On-going
WIZink Mediador, Operador de Banca Seguros Vinculado, S.A.U.	0%	49%	On-going
WIZink Gestión, A.I.E.	0%	49%	On-going
Iberalibion A.I.E.	0%	49%	On-going
IM Tarjetas 1, F.T.A.	0%	49%	On-going
Saite, S.A.	50%	0%	On-going
Fórum de Negocios del Sur, S.L.	50%	50%	Insolvency proceeding
Fórum de Negocios de Granada, S.L.	50%	50%	Insolvency proceeding
Fórum de Negocios de Motril, S.L.	82%	18%	Insolvency proceeding
Bodegas Señorío de Nevada, S.L.	0%	63%	On-going
Arco Organización, S.L.	0%	59%	On-going
Las Albanizas de Otura, S.L.	50%	50%	Insolvency proceeding
Huberos Retail 1, S.L.	0%	100%	On-going
Andara Retail, S.L.	0%	100%	On-going
Trentis Retail, S.L.	0%	100%	On-going
Saite-Cobal, S.A.	0%	50%	Insolvency proceeding
Sistema 4B, S.L.	28%	0%	On-going
Inversiones en Resorts Mediterraneos, S.L.	0%	43%	On-going
Trinidad Fondo de Inversión Inmobiliario Fechado	0%	50%	On-going
Aviación Intercontinental, A.I.E.	35%	0%	On-going
Allianz Popular, S.L.	40%	0%	On-going
Euro Automatic Cash Entidad de Pago, S.L.	50%	0%	On-going
Compañía Española de Viviendas en Alquiler, S.A.	24%	0%	On-going
Metrovacesa Suelo y Promoción, S.A.	9%	0%	On-going
Fotovoltaica Monteflecha, S.L.	0%	4%	On-going
Aevis Europa, S.L.	28%	0%	On-going
Master Red Europa, S.L.	28%	0%	On-going
Gestora Patrimonialc/Francisco Sancha, 12	28%	0%	On-going
Grupo Financiero Ve Por Más S.A. de CV	25%	0%	On-going
Sociedad de Procedimientos de Pago, S.L.	5%	0%	On-going
Testa Residencial, S.L.U.	3%	1%	On-going
Metrovacesa Promoción y Arrendamiento, S.A.	9%	0%	On-going

8. Glossary

Affected Shareholders and Creditors: holders of Ordinary Shares in the Bank, Additional Tier 1 capital instruments and Tier 2 capital instruments, that are directly impacted by the resolution decision.

Banking licence: Authorisation for the exercise of banking operations as a credit institution granted and supervised by the European Central Bank.

Claims against the estate: Any credit arising after the opening of the insolvency proceeding.

Common phase: Phase that begins after the opening of the insolvency proceeding and after its communication to the judge. The common phase ends either with the opening of the composition phase (an agreement between the debtor and the creditors. See definition below) or the liquidation phase (the company's assets are realised to compensate creditors according to the creditors' hierarchy. See definition below). The goal of this phase is to evaluate the debtor's assets and liabilities.

Company's Lawyer or Legal Advisor: Person (natural or legal) who advises the debtor as to legal rights and obligations, and represents him in court or regarding other legal matters.

Composition Phase: Phase that follows the common phase in an insolvency proceeding, when an agreement is reached between the insolvent company and the creditors. If no agreement is reached, the liquidation phase starts. However, there are other reasons for entering into a liquidation phase (cessation of business activity or insufficient assets to repay debts, among others).

Court Agent or "Procurador": Professional who represents a person (natural or legal) in a judicial process. In an insolvency proceeding, the court agent represents the debtor.

Creditor: Person (natural or legal) to whom a debt (or other financial obligation) is owed. For example, Banco Popular's depositors are creditors of Banco Popular. The main goal of the insolvency proceeding is to pay the credits that are owed.

Creditor's Composition: Agreement between the debtor and its creditors during the composition phase of the insolvency proceeding, aiming at the satisfaction of the creditors while ensuring the survival of the business.

Creditor Hierarchy: Establishes the ranking of creditors and the priority of payment of their debts in accordance with the Spanish Insolvency Act and during an insolvency proceeding.

Debtor: Person (natural or legal) who is in debt or under financial obligation to another (opposite to creditor). The insolvency declaration restricts the debtor's rights of management and disposal with regard to his/her aggregate assets.

Claims with General Preference: Claims that have a priority under the creditor hierarchy due to its public nature or interest.

Insolvency Administrator: Person (natural or legal) who is appointed to administrate the debtor's assets, with the main goal of satisfying creditors' claims.

Insolvency Administrator Report: Briefing prepared by the insolvency administrator to inform creditors and the Court on the debtors' insolvency situation. The report is submitted during the common phase and includes the list of creditors and assets.

Insolvency Declaration: Court's decision that opens the insolvency proceeding, and defines the legal nature of the insolvency (compulsory or voluntary), which impacts on the rights of the management and disposal of the debtor with regard to

his assets. In addition, it enables the communication to creditors in order to report their claims.

Insolvency Proceeding: Judicial proceeding started when a person (natural or legal) is no longer able to meet his / her financial obligations and pay his / her creditors when debts are due. Its goal is to organise his / her heritage in the most efficient way and pay the existing debts to the maximum extent possible.

Insolvency Proceeding Complexity: It is considered that an insolvency proceeding presents "complexity", among others, in the following cases:

- The number of creditors exceeds 1,000.
- The debtor has more than 250 employees on the date of the declaration of the insolvency proceeding or the average number of employees during the immediately preceding year is greater than 250.
- An extinctive collective dismissal procedure takes place and the debtor has more than 50 employees.
- The debtor is a credit institution.

Insolvency Liquidation Proceeding: Judicial proceeding related to the insolvency situation of the debtor (natural or legal person), the goal of which is to organize the payment to creditors according to the Spanish Insolvency Act (takes place during the liquidation phase of the insolvency process).

Labour Group: A group of companies, when two or more of the following conditions are met:

- iii. Companies have a single management
- iv. Companies' asset ownership cannot be differentiated
- v. Employees are shared between companies
- vi. Payments can be made from any of the companies (salaries, loans)
- vii. Fraudulent use of personality by using different companies as the employer in order to minimise the risk.

Liquidation Phase: Phase of the insolvency proceeding that begins after the common phase if no agreement is reached between the debtor and its creditors. The main goal of this phase is to implement a liquidation plan and realise the debtor's assets to pay creditors according to the creditor hierarchy.

Liquidation Quarterly Report: Document to inform on liquidation operations. The liquidator has to prepare the Report every three months and present it to the Court.

Liquidator: Person (natural or legal) responsible for realising the debtor's assets during the liquidation phase. Under the Spanish Insolvency Act, the liquidator also assumes the duties of the insolvency administrator, i.e. the insolvency administrator is also the liquidator.

No Creditor Worse Off Principle: Principle established in the BRRD's recital (5) and in Article 15(1)(g) SRMR, to guarantee the protection of creditors of an insolvent credit institution. Its goal is to ensure that if a resolution tool is implemented to an insolvent institution, creditors do not incur in greater losses than they would have incurred if the institution had been wound up under a normal insolvency proceeding.

Objective Cause: Situation under a collective dismissal agreement that allows paying a minimum compensation to employees. The dismissal itself takes place either by an economic, technical, productive or organisational cause.

Ordinary Claims: Claims that, under the creditor hierarchy, are not classified as pledge claims, claims against the estate, claims with general preference or subordinated claims.

Pledge Claims: Claims secured with debtor's rights or assets. In the liquidation phase of an insolvency proceeding, these claims are satisfied with the results of the sale from the underlying asset of the guarantee.

Subordinated Claims: Claims that rank last in the creditor hierarchy, bearing in mind that we are not considering shareholders (i.e. equity) as a creditor.

Transposition: Process by which European Directives are implemented into national law. In general terms, a Directive is a binding European Union legal instrument for member states. A Directive only regulates the result to be achieved and gives national authorities the power to decide on the form and means to obtain that result.

Valuation of difference in treatment: According to Article 74 and 75 of BRRD and Article 20 SRMR, Valuation of difference in treatment is carried out after the resolution takes place and determines whether an entity's shareholders and/or creditors would have received a better treatment if the entity had entered into normal insolvency proceedings. Therefore, it is a valuation of difference in treatment for shareholders and creditors. **Value of the Guarantee:** According to Article 94.5 of the Spanish Insolvency Act, it is the amount equivalent to nine-tenths of the value of the asset.

