

# HAITONG BANK, S.A.

# Market Discipline

Annual Report: 2018

(Disclosure in accordance with Part VIII of 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)

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## 1 Declaration of Responsibility

The Board of Directors of Haitong Bank hereby declares and certifies that:

- In the present document "Market Discipline", produced with reference to the end of 2018, all procedures deemed necessary for the public disclosure of information were developed and carried out. To the extent of its knowledge, all information disclosed in this document is true and reliable;
- The quality of all information disclosed is adequate, including that concerning or originating from entities included in the economic group of which the institution is part of;
- It undertakes to disclose, in due time, any significant changes that occur in the course of the financial year following the year that this "Market Discipline" report refers to.
- Haitong Bank has in place a risk management and control system to monitor and manage risks, which is adequate for the nature and size of the Bank.

The information presented in this document, has a reference date of December 31, 2018. During the subsequent exercise of 2019 the following event can be considered as a relevant fact: on July 12, 2019, Haitong Bank, S.A. informed the market that the Bank of Portugal gave authorization to open Macau Branch.

The Board of Directors

Lin Yong Wu Min

Alan Fernandes António Domingues

Nuno Carvalho Pan Guangtao

Paulo Martins Mo Yiu Poon

Vasco Câmara Martins Vincent Carmerlynck

Zhang Xin Jun

## 2 Identification and origins of the Banking Group

Haitong Bank, S.A. (Bank or Haitong Bank) is an investment bank based in Portugal, Lisbon, at Rua Alexandre Herculano, n.º 38. The Bank is duly authorized by the Portuguese authorities, central banks and regulators in order to carry out its business in Portugal and in the countries where it operates through international financial branches.

The Institution was established in February 1983 as an Investment Company, as a foreign investment in Portugal under the company name FINC – Sociedade Portuguesa Promotora de Investimentos, S.A.R.L.. In the 1986 financial year, the Company became part of Grupo Espírito Santo, under the name Espírito Santo – Sociedade de Investimentos, S.A.

In order to widen the scope of its business, the Institution has obtained a license from the Portuguese official bodies for its conversion into an Investment Bank, by means of Ordinance no. 366/92 of November 23rd, published in the Portuguese Official Gazette – Series II – no. 279, of December 3rd. Its business as an Investment Bank started on the 1st of April, 1993, under the company name Banco ESSI, S.A.

In the 2000 financial year, Banco Espírito Santo, S.A acquired the whole of BES Investimento's share capital in order to reflect all existing synergies between both institutions in its consolidated accounts.

On the 3rd of August, 2014, following the implementation of a resolution measure by the Bank of Portugal, applied to Banco Espírito Santo, S.A., the Bank became held by Novo Banco, S.A.

Haitong International Holdings Limited acquired the whole of BES Investimento's share capital on September 2015, and the Bank's company name was thereby changed into Haitong Bank, S.A.

Haitong Bank currently operates through its headquarters in Lisbon, as well as through branches in London, Warsaw and Madrid, and subsidiaries in Brazil and Ireland.

Haitong Bank's financial statements are consolidated by Haitong Internacional Holdings Limited, based in Li Po Chun Chambers, n.º 189, Des Voeux Road Central, in Hong Kong.

# 3 Scope and basis of consolidation for accounting and prudential purposes

This document reflects the consolidation perimeter of Haitong Bank for prudential purposes, which coincides with its accounting consolidation scope. The group of companies where the Bank has a direct or indirect holding greater than or equal to 20%, over which the Bank exercises control or has significant influence, are included in the consolidated scope and the method applied for each entity within the accounting and the regulatory scopes of consolidation, is presented below:

Name of the entity	Incorporation Date	Acquisition Date	Headquarters	Activity	% Economic interest	Method of accounting consolidation
Haitong Bank, S.A.	1983	-	Portugal	Investment bank	100%	Full consolidation
Haitong Capital - SCR, S.A.	1988	1996	Portugal	Venture capital	100%	Full consolidation
SES Iberia	2004	2004	Spain	Asset management - investment funds	50%	Full consolidation
Fundo Espírito Santo IBERIA I	2004	2004	Portugal	Venture capital fund	46%	Equity method
Haitong Banco de Investimento do Brasil S.A.	2000	2000	Brazil	Investment bank	80%	Full consolidation
FI Multimercado Treasury	2005	2005	Brazil	Investment fund	80%	Full consolidation
Haitong do Brasil Participações Ltda	2004	2004	Brazil	Asset management	80%	Full consolidation
Haitong Negócios, SA	1996	1999	Brazil	Holding company	80%	Full consolidation
Haitong do Brasil DTVM, SA	2009	2010	Brazil	Asset management	80%	Full consolidation
Haitong Securities do Brasil S.A.	2000	2000	Brazil	Brokerage house	80%	Full consolidation

Haitong Investment Ireland plc is included in the consolidation perimeter, classified as discontinued operations.

**Table 1** – Haitong Bank's scope of consolidation

Table 1 is aligned with EBA Template 3: EU LI3 – Scope of consolidation (entity by entity).

The main changes made to the group structure in 2018 are set forth below.

#### **Subsidiaries**

- In January 2018 Haitong do Brasil Participações, Ltda. sold Haitong Negócios, S.A. to Haitong Banco de Investimento do Brasil, S.A. having received BRL 32 671 thousand.
- In January 2018 Haitong Banco de Investimento do Brasil, S.A. fully subscribed the capital increase of Haitong Negócios, S.A., an investment of BRL 50 090 thousand.
- In January 2018 Haitong Banco de Investimento do Brasil, S.A. fully subscribed the capital increase of Haitong Investimento DTVM, SA, an investment of BRL 32 525 thousand.
- In February 2018, the process of selling Haitong Securities USA LLC, Haitong UK Limited and Haitong Securities (UK) Limited subsidiaries to Haitong International BVI was concluded. The price for the sale of Haitong Securities USA LLC was USD 16 778 thousand. The price for the sale of Haitong UK Limited and Haitong Securities (UK) Limited was 12 536 thousand.
- In September 2018 Haitong Banco de Investimento do Brasil, S.A. fully subscribed the capital increase of FI Multimercado Treasury, an investment of BRL 5 000 thousand.
- Following the decision from the management, since December, 2018 the Group is
  preparing the sale of its Irish subsidiary Haitong Investment Ireland plc, which should be
  concluded within one year. As a consequence of this decision, the Irish subsidiary's
  assets and results were reclassified to the discontinued operations line.

#### **Associates**

- In May 2018, MCO2 Sociedade Gestora de Fundos de Investimento Imobiliário, S.A. has been closed, by the amount of 37 thousand euros.
- In September 2018, a distribution of capital of the Espírito Santo IBERIA I Fund was made, the amount of 942 thousand euros was attributed to Haitong Capital-SCR, S.A..
- In October 2018, Windpart, Lda. has been closed.
- In November 2018, a capital distribution of the Espírito Santo IBERIA I Fund was made, the amount of 871 thousand euros was attributed to Haitong Capital-SCR, S.A..

In addition to the aforementioned, the following should be highlighted:

I. To the extent of the Bank's knowledge, there is no material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities between the Bank and its Subsidiaries;

- II. There are no subsidiaries not included in the prudential scope of consolidation whose actual own funds are lower than the minimum required;
- III. There are no subsidiaries included in the Bank's scope of consolidation that are deducted from own funds for prudential purposes, in accordance with Regulation (EU) no. 575/2013;

#### 4 Risk management objectives and policies

# 4.1 Statement on Haitong Bank's risk profile and its connection to the business strategy

Haitong Bank's strategy is to leverage on the opportunities emerging from China's internationalization, combining its expertise in Western markets with Group cross-border origination and distribution. Haitong Bank is committed to serve its European and Latin American corporate and institutional clients alongside a growing Chinese client base.

The increasing internationalization of Chinese companies has fuelled demand for value-added services within overseas Advisory Services, Structured Finance and Capital Markets. This provides the Bank with an unrivalled competitive advantage in core investment banking services.

Haitong Securities - the ultimate Shareholder of Haitong Bank - is a first mover Chinese securities firm with banking licenses in Western markets. Its expertise in those markets is a strong competitive advantage over other Chinese players, both domestically and abroad.

Chinese investors have assumed prominent positions as foreign investors in markets in Europe, including the main regions where Haitong Bank operates (Portugal, Spain, Poland and the United Kingdom). Regarding Brazil, China is not only the largest trading partner but also a key source of foreign direct investment. In addition, new Chinese foreign economic initiatives such as the "One Belt One Road" program will take Chinese foreign investments across Asia and into Central Europe where Haitong Bank has a presence through its Warsaw branch.

Haitong Bank will continue to be a local player in its historical franchises. This includes working on domestic transactions with local clients in its core markets in Portugal, Spain, Poland, the UK and Brazil. However, the expected limited growth in pure domestic transactions in these markets should be counterbalanced by growing cross-border China-related business.

Haitong Bank has returned to profitability in 2018. Following the measures to achieve a leaner operating cost structure, Haitong Bank has succeeded in 2018 in improving and developing its business model, returning to consistent operating and bottom-line profitability. The strong performance in the origination of China-related business, the operating costs discipline and lower impairments have supported this performance.

Going forward, the primary goal for 2019 is to expand the balance sheet, allowing the Bank to maintain operating profitability and improve recurrent revenues by leveraging on its core competitive advantages: the access to China-related business flow as well as its core domestic franchises. The Bank is a Corporate and Institutional Bank, committed to serving its European and Latin American corporate and institutional clients alongside a growing Chinese client base.

Regarding asset quality, significant progress was achieved as the stock of non-performing loans fell. With the reclassification of the loan portfolio from the Irish subsidiary, the default ratio dropped to 8.2% from 37.3%. Taking into consideration the growth prospects of the loan portfolio and the slight reduction of the NPLs stock, Haitong Bank's credit quality is expected to improve, as the non-performing ratio should decrease to 5.0% in 2021.

Haitong Bank's three-year Business Plan growth ensures the creation of enough capital to withstand the planned increase of assets and meet the internal and regulatory capital requirements. The prudent capital management implemented by the Bank has strengthened solvency levels, leading to a highly solid capital position over the next three years.

Haitong Bank has an adequate funding structure. The Bank has a diversified funding structure and a solid liquidity position, allowing it to maintain a Net Stable Funding Ratio above the 100% minimum requirement during the period of the business plan while accommodating the asset growth strategy.

The Risk Appetite Policy of Haitong Bank constitutes an essential pillar in the business development of Haitong Bank and in the execution of its business strategy.

The figure below show how Haitong Bank structure its Risk Appetite Framework highlighting the critical interconnection between business strategy and risk policy.

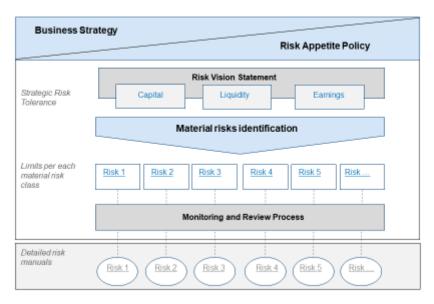


Figure 1 - Risk Appetite Framework

Within the scope of the Risk Appetite Policy, the Board of Directors approved the following Risk Vision Statement of Haitong Bank:

Haitong Bank acknowledges that its risk management function is a key factor to achieving the Group's strategic objectives and provides an additional line of defence in protecting its enterprise value.

Haitong Bank's overall Risk Vision Statement, approved by the Board of Directors, rests on the following three guiding principles:

 Capital: Haitong Bank aims to maintain prudent capital buffers on top of both internal and regulatory capital requirements

- Liquidity and Funding: Haitong Bank as a whole and all its subsidiaries individually aim to maintain a solid short-term position and a sustainable medium long-term funding profile.
- Earnings: The Group has a goal of generating recurrent earnings to guarantee its sustainability and a reasonable level of profitability for shareholders.

In defining the material risks and the limits the Bank is willing to accept, the Board of Directors is deliberately introducing boundaries on the definition and execution of the Bank's strategy, ensuring business activities are pursued within acceptable risk levels.

Thus, the Risk Vision Statement is reflected in the wide set of limits defined by the Board of Directors for all material risks, including Pillar I and Pillar II risks. These limits are set on a consolidated basis, with the Brazilian subsidiary having its own specific limits.

# 4.2 Capital and liquidity key ratios and figures

Haitong Bank's capital and liquidity key ratios and figures, over the period of the last three years, were as presented in the table below:

(Amounts in Thousands of Euros)

	Dec. 18	Dec. 17	Dec. 16
CRD IV/CRR phasing in	(c)	(b)	(a)
Common equity tier 1	423 087	461 011	202 639
Risk Exposure	1 848 350	2 173 840	2 873 988
Ratio Common equity tier 1	22,9%	21,2%	7,1%
Leverage Ratio	18,6%	15,0%	6,1%
Liquidity Coverage Ratio	426%	610%	328%
Net Stable Funding Ratio	116%	149%	115%

- (a) According to CRD IV/CRR phasing in rules for 2016
- (b) According to CRD IV/CRR phasing in rules for 2017
- (c) According to CRD IV/CRR phasing in rules for 2018

Table 2 – Haitong Bank's Capital and Liquidity key ratios and figures

As of December 2018, both capital and liquidity ratios present values well above the regulatory limits for each indicator, reflecting the strong capital and liquidity positions of Haitong Bank, well above the internal limits approved by the Board of Directors within the scope of the Risk Appetite Policy.

#### 4.3 Strategies, policies and procedures to manage risks

Within the scope of its Risk Appetite Framework, Haitong Bank has identified and regularly reviews the set of material risks inherent to its activity, for which it establishes specific management strategies, controls, metrics and limits.

#### **Credit Risk**

Credit risk is the potential financial loss arising from the failure of an obligor or counterparty to honour its contractual obligation. As the major risk to which the Bank is exposed, credit risk management and control is supported by a process that allows the identification, assessment, quantification and reporting.

Credit portfolio management is carried out as an ongoing process that requires the coordination between the different teams/functions in charge of management of this risk throughout the different stages of the credit process.

#### **Limit Setting**

All transactions and operations encompassing credit risk taking for the Bank are assessed and decided by the Credit Committee, within the Credit Decision Framework established by the Executive Committee.

The Credit Committee also issues non-binding opinions concerning deals that fall outside the Credit Decision Framework approved by the Executive Committee or the Risk Appetite Framework approved by the Board of Directors, in which case operations shall be submitted, respectively, to the Executive Committee or to the Board of Directors.

The Executive Committee periodically reviews the Credit Committee's Decision Framework in order to assure its full alignment with the Bank's credit strategy.

# **Internal ratings**

The assessment of a counterparty's creditworthiness focuses on identifying the main business and financial risks related to the counterparty. Based on that assessment, an internal rating is derived, which measures the one-year probability of default (PD) assigned to the counterparty.

The rating assessment is assigned using internal rating tools and methodologies sponsored by Standard & Poor's (S&P). Although centralized at the headquarters, the internal rating assignment is carried out by experienced analysts located in Lisbon, Warsaw and São Paulo.

All credit exposures are subject to permanent monitoring of contractual compliance and events/early signals that could potentially lead to or indicate an increase in credit risk. The Rating Department is responsible for the annual individual review of a counterparty's credit risk, including the rating re-assessment.

#### **Monitoring**

The credit risk monitoring and control activities aim to quantify and control the evolution of credit risk and to allow the early definition and implementation of measures to deal with situations where there is a deterioration of risk – with a view to mitigating potential losses -, as well as to outline global strategies for credit portfolio management.

In this context, and with the central goal of complying with risk management standards, the credit risk monitoring function and its implementation are objectively considered as one of the top priorities of the control system and the risk management function.

# Monitoring of under-performing and non-performing clients

To strengthen the surveillance over the lending activities the Impairment Committee has the specific purpose of analysing the individual impairment of under-performing and non-performing financial instruments.

The identification of under-performing clients is accomplished whenever there has been a significant increase in credit risk since initial recognition of the financial instrument.

Non-performing exposures include the financial assets considered in default by applying the same definition used for prudential purposes.

The Impairment Committee takes in consideration historical and prospective information about the clients under analysis, including the amount and type of exposure (e.g.: on- and off-balance), the counterparty's rating and, whenever applicable, the nature and estimated value of collaterals, and, finally, the recovery scenarios (depending if it is a going-concern or gone-concern case).

On an annual basis, the 20 largest corporate exposures are subject to review by the Impairment Committee, being the purpose of this analysis to confirm that these clients do not display any early warning signals.

#### Global risk analysis of credit portfolios

The monitoring of the credit portfolio is reported on a regular basis to the Board of Directors, the Executive Committee and the Risk Committee of the Bank.

The portfolio limits are used to monitor the evolution of the risk appetite of the various credit portfolios. Compliance with the established ceilings is monitored and reported on a regular basis.

Regarding concentration risk – that is, the risk that arises from the possibility of an exposure or a group of exposures that share common or interrelated risk factors producing sufficiently large losses to undermine the Bank's solvency –, Haitong Bank has established internal limits for the largest individual exposures, rating concentration for new credit risk positions, and limits for sovereign risk exempted for prudential purposes.

# Credit recovery process

Special Portfolio Management Department manages the Bank's non-performing exposures, negotiating and implementing the restructuring and/or credit recovery strategies, aiming to maximize the credit recovery.

#### **Market Risk**

Market risk is the possibility of occurrence of losses in on- and off-balance sheet positions resulting from adverse movements in market prices, such as equity, interest rates, foreign exchange rates and credit spreads. In the development of its activities, Haitong Bank is exposed to market risk in both its trading and banking books.

Haitong Bank has in place policies, procedures and systems for market risk management, enabling the assessment and control of all the relevant market risk factors to which the Bank is exposed to.

The identification, measurement, monitoring and reporting of the Bank's market risk are the responsibility of a specific unit within the Risk Management Department, the Market Risk Control unit, which works in full independence of the Bank's business areas.

In organizational terms, Market Risk Control functions are spread geographically over the Group's different entities, which have the appropriate skills to evaluate the specific activities and risks incurred by each entity.

The Market Risk Control unit is responsible for analysing the relevant factors for each type of risk using statistical techniques, measuring market volatility, analysing depth and liquidity indicators, and simulating the transactions value under different market conditions to advise the Credit Committee and Executive Committee on the establishment of market risk limits.

To provide the organisation with a clear understanding of the risks incurred and of its desired risk appetite, the Bank uses a comprehensive set of risk metrics, and respective limits, complemented by stop loss and concentration limits. These risk metrics include VaR (Value at Risk) and sensitivity metrics for interest rates, credit spreads, foreign exchange rates, equity prices and volatility.

#### **Trading Book**

The Bank estimates the potential losses in its trading book and for the overall commodity and foreign currency positions using the historical Value at Risk (VaR) methodology, calculated considering a 99.0% confidence level, an investment period of 10 business days and 1 year of historical observation.

#### **Banking Book**

Other risks in the banking book arise from adverse movements in interest rates, credit spreads and in the market value of equity securities and real estate in non-trading exposures in the banking book.

# **Interest Rate Risk of the Banking Book**

Interest rate risk in the banking book may be understood in two different but complementary ways, namely as the effect on the net interest margin, or as the effect on the banking book portfolio's economic value resulting from interest rate movements.

Haitong Bank measures interest rate risk in the banking book using income based (NII: Net Interest Income) and value based (EVE: Economic Value of Equity) metrics.

The Net Interest Income measures the sensitivity of an interest rate movement on the Bank's net interest income over a 1- year period assuming static balance sheet.

Under the Economic Value of Equity measure, the Bank assesses the impact on the present value of cash flows due to an interest rate movement, considering the current balance sheet run-off profile.

Fluctuations in market interest rates can affect the Bank's net interest margin by altering the amount of income and costs associated with interest rate sensitive instruments, as well as by impacting the value of the underlying assets, liabilities and off-balance sheet instruments.

The banking book exposure to interest rate risk is calculated in accordance with the Bank for International Settlements (BIS) methodology, classifying all interest rate sensitive assets, liabilities and off balance sheet items, excluding those from trading, using repricing tenors.

The model used is similar to the duration model, using a stress testing scenario corresponding to a parallel shift of 200 basis points in the yield curve for all interest rate levels (Instruction 38/2019 of the Bank of Portugal).

#### **Credit Spread Risk**

The credit spread, which reflects the ability of an issuer to meet its obligations up to their maturity, is one of the factors considered in the assets' valuation. It represents the difference between the interest rate of a risky asset and the interest rate of a risk-free asset in the same currency and with the same maturity.

The credit spread risk of an asset derives from the respective issuer's credit spread volatility. This risk is measured based on a VaR at 99.0% confidence level and a holding period of one year.

The Bank is also subject to other types of risk in the banking book, namely the risk of Equity Holdings and the risk of Mutual Funds. These risks may broadly be described as the probability of a loss resulting from an adverse change in the market value of these financial instruments

#### **Pension Fund Risk**

The pension fund risk stems from the possibility that the pension plan liabilities exceed the value of the pension fund portfolio of assets in such a way that Haitong Bank is required to make an extraordinary contribution to the pension fund. Otherwise, if the pension fund portfolio of assets' return is in line with the liabilities evolution, Haitong Bank is expected only to make the regular annual contribution (the pension plan normal cost). In order to mitigate the risk of a mismatch between the liabilities and the portfolio of assets, Haitong Bank has implemented a strategic asset allocation to the pension fund based on an Asset Liability Modelling exercise and has in place a governance structure that regularly monitors the pension scheme solvency evolution (liabilities growth vs. portfolio of assets).

There is a pension fund follow up committee that monitors the pension scheme (based on an external independent provider report) which includes the portfolio of assets performance and integrated Value-at-Risk (i.e. VaR taking into account expected assets and liabilities evolution) with 5% statistical significance on a year forward basis. This allows Haitong Bank to monitor the expected funding solvency and if the return / risk metrics are within the acceptable range defined in the Asset Liability Modelling exercise.

#### **Operational Risk**

Haitong Bank defines operational risk as the risk of loss resulting from inadequate internal procedures or its negligent application, inadequacy or failure of information systems, staff behaviour or external events. Legal and IT risks are included in this definition. Operational risk is therefore considered as the sum of operational, information systems and compliance risks.

Operational risk is managed through a set of procedures that standardise, systematise and measure the frequency of actions aimed at the risk identification, assessment, mitigation/response, monitoring and control and report. The priority in operational risk management is to identify and mitigate or eliminate risk sources.

The management methodologies in place are supported by the principles and guidelines to operational risk management issued by the Basel Committee and those underlying the Risk Assessment Model implemented by the Bank of Portugal.

The operational risk management model is supported by an exclusively dedicated structure within the organisation which is responsible for the following processes:

- Identification and assessment of processes, risks and controls through risk and control self-assessment exercises;
- Identification and assessment of operational risks in new products and services, including the need to implement new controls to mitigate identified risks;
- Identification, analysis and reporting of operational risk events;
- Monitoring risk through a selected set of risk indicators;
- Calculation of capital requirements in accordance with the Standardized Approach.

# **Liquidity Risk**

Liquidity risk arises from an institution's present or future inability to meet all payment obligations when they come due or secure such resources only at an excessive cost.

Liquidity and funding management is a key element in Haitong Bank's business strategy and a fundamental pillar, together with capital, in supporting its strength and resilience.

Liquidity management and Haitong's funding strategy are the responsibility of the Executive Committee which assures the management of the Bank's liquidity in an integrated way, with the treasuries of all Haitong Bank's entities.

To provide protection against adverse scenarios and based on a solid organizational and governance model, Haitong Bank liquidity risk management envisages delivering appropriate term and structure of funding consistent with the following principles:

- Ensure the ability to meet obligations as they come due in a timely manner and at a reasonable cost:
- Comply with regulatory standards on liquidity in each geography the Bank operates in;
- Ensure full alignment with liquidity risk appetite;

- Make available a sufficient immediate liquidity buffer to ensure ability to react to any
  event of stress that could restrict the ability to access financial markets under both
  normal and stressed conditions;
- Develop a diversified investors' base and maintain access to a variety of alternative funding sources, while minimising the cost of funding; and
- Continuously develop an appropriate internal framework for the identification, measurement, limitation, monitoring and mitigation of liquidity risk.

#### Other Risks

Concerning other risks, namely Business Strategic Risk and Reputational Risk, the Bank has in place monitoring procedures that are evaluated on a regular basis.

Business Strategic Risk is the probability of having negative impacts on earnings or capital due to inadequate strategic decisions, inadequate implementation of decisions or the inability to address changes in the Bank's business environment.

Business strategic risk is managed directly by the Executive Committee with the monthly followup of the Bank's activity with information provided by the Finance Department. The Risk Management Department monitors the limits established in the Risk Appetite Framework related with the Bank's economic performance.

Reputational risk is the probability of having negative impacts on earnings or capital arising from a negative perception of the public image of the Bank, substantiated or not, by customers, suppliers, financial analysts, employees, investors, media outlets or by public opinion in general.

Reputational Risk is a permanent concern of the Bank and reputational risk is addressed when approving new products or services, in the New Business Committee, and when approving new operations, even when the Bank does not take financial risks, in the Adoption Committee.

# **Capital Management**

The capital management practices and guidelines are shaped to accomplish the business' strategic goals and the risk appetite set by the Board of Directors. Accordingly, with the objective of maintaining capital that is suitable in quantity and quality, Haitong Bank has in place a capital management framework based on the following objectives:

- Promote sustainable growth of activity by creating enough capital to withstand the increase of assets,
- Meet the minimum requirements established by the supervising entities in relation to capital adequacy and
- Ensure the achievement of the strategic goals set by the Group in relation to capital adequacy.

Complementing the regulatory focus, Haitong Bank executes periodically an internal risk-based capital self-assessment (ICAAP) that consists of a forward-looking measurement of all material risks incurred by Haitong Bank (including the ones not covered by Pillar 1 regulatory capital).

Additionally, Haitong Bank as part of his capital management policy, performs a recovery plan, which provides the escalation path for crisis management governance and identifies the list of actions and strategies designed to respond to a capital stress event.

## 4.4 Structure and organization of the Risk Management Function

As ultimate responsible for Haitong Bank's Risk Management Framework, the Board of Directors is aware of the types of risks to which the Bank is exposed and the processes used to identify, evaluate, monitor and control those risks, as well as the legal obligations and the duties to which the institution is subject. It is accountable for the establishment and maintenance of an appropriate and effective risk management structure.

The current structure of the relevant committees for Haitong Bank's Risk Management function is summarized below.

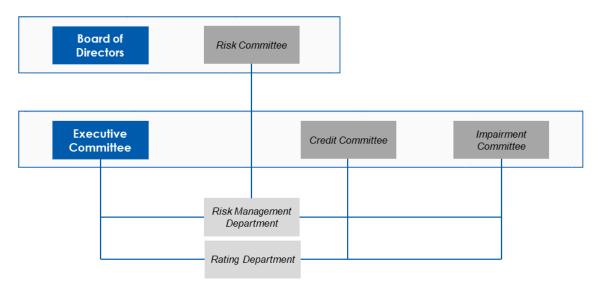


Figure 2 – Risk Management Framework

## **Risk Committee**

The Risk Committee mission is to continuously monitor the development and implementation of the Bank's risk strategy and its risk appetite and verify whether these are compatible with a sustainable strategy in the medium and long term.

The Risk Committee of the Bank is appointed by the Board of Directors and is composed by three members of the Board of Directors (two of which independent directors) who do not perform executive functions. The Risk Committee shall carry out its responsibilities with full independence and authority.

The Risk Committee is responsible for:

- Advising the Board of Directors on the risk appetite and risk strategy of the Bank, both current and future, taking into account all categories of risk, ensuring its alignment with the business strategy, objectives, corporate culture and values;
- Assisting the Board of Directors in supervising the execution of the risk strategy of the Bank and the compliance with the applicable limits;

- Periodically reviewing the risk profile, risk policies and strategies of the institution;
- Assessing the consistency between the business model, strategy, recovery plan, remuneration policies and the budget, as well as the efficiency and effectiveness of the structure, procedures and instruments associated with the implementation and execution of the strategies regarding risk;
- Issuing recommendations on adjustments to the risk strategy resulting from changes in the business model, market developments or business context where the Bank operates;
- Analysing and evaluating the methodology and its results to support the process of identification, evaluation and measurement of risks;
- Examining scenarios, including stress tests, in order to determine their impact on the risk profile of the Bank and to assess the resilience of the changes within the institution caused by idiosyncratic, systemic or mixed factors;
- Analysing whether the conditions of the products offered and services provided to clients take into consideration the transaction model and risk strategy of the Bank, and, if necessary, submitting a correction plan to the Board of Directors when, as a result of such analysis, it is established that those conditions do not appropriately reflect the risks;
- Establishing if the incentives set forth in the remuneration policy of the Bank take into consideration risk, capital, liquidity and the expectations regarding results, including revenue dates;
- Establishing the framework for reporting on risk to the Board of Directors;
- Ensuring the existence of effective procedures for monitoring risk, and monitoring internal control deficiencies related to the risk management framework;
- Specifying and reviewing the conditions of authority and independence to support the
  exercise of responsibilities for risk management, including the adoption of the work plan
  of the risk management function;
- Reviewing and periodically monitoring the scope and nature of the activities carried out by the Haitong Bank Group, related to risk management;
- Ensuring that the risk management function has adequate resources for the performance of its duties.

In 2018, the Risk Committee held seven meetings. Risk Committee has its ordinary meetings every two months and meets on an extraordinary basis when necessary to ensure the good performance of its duties, upon a reasoned request submitted by any of the corporate bodies of the Bank or of any of the members of the Risk Committee.

#### **Credit Committee**

The Credit Committee, established by the Executive Committee with the authorization of the Board of Directors, is responsible for:

- Assessing and deciding on operations involving risk taking for the Bank within the Credit Committee's Decision Framework established by the Executive Committee;
- Issuing non-binding opinions regarding operations that fall outside of:
  - (i) the Credit Committee's Decision Framework approved by the Executive Committee;
  - (ii) the Risk Appetite Framework ("RAF") approved by the Board of Directors; in these cases operations shall be submitted, respectively, to the Executive Committee or to the Board of Directors assessment.

The Executive Committee establishes and periodically reviews the Credit Committee's Decision Framework in order to assure its full alignment with the Bank's credit strategy.

# Impairment Committee

The Impairment Committee of Haitong Bank is responsible for the analysis and decisions on impairment amounts to be assigned to credit clients subject to individual analysis. The 20 largest performing corporate exposures are subject to review by the Impairment Committee on an annual basis, with the purpose to confirm that these clients do not display any warning signals that imply a transfer of stage.

The Impairment Committee has deliberative powers as part of its duties established by the Executive Committee. The duties of the Impairment Committee cover all entities of the Haitong Bank Group.

The Impairment Committee is chaired by the Chief Executive Officer. This Committee shall meet whenever called by its Chairman or upon the request of any of its members, subject to the approval of the Chairman, and as a rule, once every month. The Impairment Committee shall meet on an extraordinary basis whenever deemed appropriate for the proper performance of its tasks.

#### Risk Management Department

The Risk Management Department is the independent structure responsible for the implementation and monitoring of the Risk Appetite Framework, ensuring the development and implementation of a Risk Management Framework based on robust processes of identification, evaluation, monitoring and control of risks inherent to the Bank's activity, consistently incorporating risk, capital and liquidity concepts into the Bank's strategy and business decisions.

The Risk Management Department is also in charge of the technical execution of the Risk Appetite Framework, Recovery Plan, ICAAP and ILAAP, and other regulatory reporting undertakings.

The Department holds its main structure in the Head Office and has local teams in the Polish branch and in the Brazilian subsidiary.

The local team in Poland is an extension of the head office team reporting both to local management structures and to the Risk Management Department in Lisbon.

In Brazil, the local risk team has functions similar to the ones performed in Lisbon, reporting to the local CRO and to the Group's CRO.

The Risk Management Department has the following structure:



Figure 3 – Risk Management Department Structure

The Credit Risk Area is responsible for credit risk portfolio monitoring and control activities.

The Capital Adequacy Area is responsible for the constant monitoring of regulatory capital requirements and for the capital planning.

The Market Risk Area is responsible for monitoring and controlling market risks, namely trading book risk, interest rate risk of the banking book, credit spread risk, foreign exchange risk and risks in holding mutual funds and equity positions.

The Liquidity Risk Area is in charge of monitoring funding and liquidity risk of the Bank and participate in the funding planning.

The Operational Risk Area is responsible for conducting the processes for the identification, monitoring and control of operational risk and for the monitoring of reputational risk.

Despite the roles of the different committees established to directly monitor and manage risks, both the Board of Directors and the Executive Committee closely monitor risks across the Bank, through monthly reporting covering all Risk Appetite limits and metrics.

#### **Rating Department**

During the reporting period, the "rating activities" were detached from the Risk Management Department. As such, together with the Risk Management Department, the Rating Department is part of the Risk Control Function of Haitong Bank. The Rating Department plays a key role in supporting the Bank's decision-making process at the Credit Committee and Executive Committee and assisting the Impairment Committee in its impairment assessment on an individual basis.

Both the Risk Management Department and Rating Department report directly to the Chief Risk Officer, an executive member of the Board of Directors.

#### 4.5 Risk reporting and measurement systems

Haitong Bank has in place an integrated set of processes that enable the identification, measurement, aggregation and appropriate reporting of the different risks to which the Bank is exposed to.

These processes allow the extraction, transformation and population of the Bank's data warehouse with information from the different systems to support the production of both internal and external reports, as well as prudential reports.

Based on the information available in the Bank's data warehouse, the Risk Management Department produces reports to monitor and control the risk taking activities, assessing their fit with the Bank's risk appetite and established risk limits, and distributes them to the risk taking units to support their decision-making process.

These reports are summarized as follows:

#### Credit Risk

- Daily collection, preparation, control and reporting to the different business areas of credit information on collateral coverage, breached limits and covenants control vis-àvis the approved limits;
- Weekly risk reporting with an overview of the Bank's credit risk, including new/recent approvals by the Credit Committee, breached limits and covenants control *vis-à-vis* the approved limits, and additional credit risk information.
- Monthly report of the Risk Appetite Monitoring, with an overview of the Bank's asset quality and concentration risk.
- Preparation of support material for external and internal reporting on credit.

## Market Risk

- Daily collection, preparation, control and reporting to the different trading desks and to
  the treasury department information on positions, results, exposure and level of limits
  utilization based on the different risk metrics defined by the Bank such as VaR, Stop Loss,
  sensitivity exposure to the different risk factors and other complementary
  concentration metrics;
- Weekly risk reporting with an overview of the Bank's market risk and limits utilization;
- Monthly report of the Bank's Global VaR and Stop Loss exposures vis-à-vis the approved limits;
- Quarterly report of the Bank's interest rate risk of the banking book, which is included in the Risk Appetite Monitoring report.

# **Operational Risk**

- Operational risk report to the management bodies is included in the Risk Appetite Monitoring, being the focus of this report the following data:
  - Monthly, the operational events and losses that crystalized. If an event breach the limit set in the bank's Risk Appetite Framework, the resolution action is also presented in this forum;
  - Monthly, the key risk indicators, which enable the bank's monitoring of some of its risks:
  - Annually, the Risk Control Self-Assessment which aims all the departments of the bank to identify, assess and mitigate its risks.

# **Liquidity Risk**

 Liquidity risk reporting is included in the Risk Appetite Monitoring report and includes analysis on the evolution of liquidity prudential ratios and of the composition of the HQLA (High Quality Liquid Assets) portfolio.

#### Pension Fund Risk

• Pension fund risk is monitored in the Pension Plan Monitoring Committee.

#### Reputational Risk

 Reputational risk reporting is included in the Risk Appetite Monitoring report upon the occurrence of material reputational risk event.

## 4.6 Information flow on risk to the management body

The Risk Management Department prepares and presents to the management bodies, on a regular basis, a comprehensive report on the overall risk position of the Bank, covering all material risks and monitoring all Risk Appetite Framework metrics — the Risk Appetite Monitoring report.

The Risk Management Department presents the Risk Appetite Monitoring report to the Executive Committee every month. Additionally, the Risk Management Department presents the Risk Appetite Monitoring report to the Board of Directors in every ordinary meeting of the Board. Non-regular reporting to the Executive Committee and to the Board of Directors may occur whenever the Head of the Risk Management Department deems necessary or any member of the management bodies requires such reporting.

# 4.7 Policies for hedging and mitigating risk

Haitong has in place risk mitigation techniques related with credit risk and credit concentration risk, namely:

- Guarantees and Collaterals: the main risk mitigation techniques used by the Bank are financial pledges (funded credit protection – financial collateral) and personal guarantees (unfunded credit protection with substitution effect). The Bank follows the prescription of CRR in what concerns collateral haircuts for impairment calculation. Thus, instead of using the collateral value, the Bank considers the collateral value after the haircut application;
- Risk mitigation techniques used in markets area: among the techniques used by the Bank for risk mitigation, we highlight the repo-style transactions, netting, margin accounts and credit derivatives;
- Portfolio limits: the definition and approval of limits is performed by the Credit Committee according to the Risk Appetite Framework;
- Existence of follow up and monitoring committees: the Executive Committee and Risk Committee follows the evolution of the Bank's credit risk on a regularly basis;
- Existence of a reporting system (internal and external): reports on the evolution of credit
  risk are performed on a daily, weekly and monthly basis and are distributed to relevant
  persons at different organization levels;

To mitigate the market risk arising from the trading and banking books, the Bank establishes limits to the level of exposure of each risk taking unit and employs different strategies to manage and hedge the market risk, such as entering into derivatives transactions that partially or completely offset the risk and/or closing of positions. The Risk Management Department monitors and reports the different risk taking units' exposure to market risk to ensure compliance with the established limits.

Haitong Bank enters into derivatives transactions to hedge the market risk on its issued debt designated at fair-value through profit and loss and has appropriate processes in place to clearly identify the relation between the hedging instrument and the financial liability being hedged.

In what regards reputational risk, Haitong Bank has in place the following risk mitigation and control techniques:

- Products, Services and Processes Sign-off: the review and assessment of new products, activities, processes and systems prior to its release or deployment is particularly relevant for the mitigation of reputational risk.
- Losses Report: the losses database, which contains information on real events, feeds the
  risk identification and risk monitoring processes. All the reputational events that
  originate losses are reported.
- Policies, codes of conduct, guidelines and procedures: these elements are of vital importance not only to achieve the Bank's business goals, but also to guide the behaviours and actions of all elements of the Bank from top management to staff so that they do not put the Bank's reputation in jeopardy.
- Business Continuity and Crisis Management Plan: the business continuity and crisis
  management includes the planning and preparation of an effective response to
  reputational events that may affect the Bank's ability to continue to operate under
  normal circumstances.

Haitong Bank's operational risk is mitigated by the active management of operational risk which includes procedures for the regular identification and assessment of operational risk across the institution, performing annual risk and control self-assessment exercises and collecting and analysing the operational risk events, taking corrective actions when appropriate.

Haitong Bank's liquidity risk mitigation techniques include:

- a process for monitoring and reporting a set of liquidity risk metrics whose limits are
  established within the Risk Appetite Framework, including prudential liquidity ratios for
  which a buffer above regulatory limits is established;
- proactive management of liquidity and funding with quarterly cash flow and liquid assets position forecast;
- stress test exercises within the scope of the ILAAP and the Recovery Plan;
- close monitoring of liquidity position by the Executive Committee.

## 5 Management body disclosures

The following table shows the number of directorship positions held by each member of the Board of Directors:

Board of Directors	Number of directorship positions			
Chairman				
Lin Yong	6			
Members				
Wu Min	2			
Alan do Amaral Fernandes	3			
António Domingues	4			
Christian Georges J. Minzolini <sup>1</sup>	5			
Mo Yiu Poon	2			
Nuno Miguel S. Figueiredo Carvalho²	1			
Pan Guangtao	4			
Paulo José Lameiras Martins	4			
Vincent Marie L. Camerlynck	4			
Xinjun Zhang	3			
Vasco Câmara Martins³	1			

<sup>&</sup>lt;sup>1</sup>Resigned from the Board of Directors on October 8<sup>th</sup>, 2018

**Table 3** – Number of directorships held by the members of the Board of Directors

# Recruitment policy and diversification policy for the selection of members of the management body

The Policy on the selection and assessment of members of the management and supervisory bodies and key function holders of Haitong Bank (the "Selection and Assessment Policy") was updated and approved by Shareholder resolution in December 28<sup>th</sup> 2018. This Policy aims at complying with provisions in Article 30-A/2 of the Legal Framework of Credit Institutions and Financial Companies (hereinafter "RGICSF") and ensuring that Haitong Bank adopts the highest national and international standards of governance of credit institutions.

This policy aims to ensure the suitability of the members of the corporate bodies and key function holders, not just at the beginning of their duties but also throughout their term of office. In this context, suitability refers to the members' ability to ensure, at all times, a sound and prudent management of the financial institution, viewing, in particular, the safeguarding of the financial system and the interests of its clients, depositors, investors and other creditors. For this end, the said officers must comply with the fit and proper, professional qualification, independence and availability requirements.

The Selection and Assessment Policy establishes the following:

- i) identification of the persons responsible for assessing the suitability of the Bank's officers:
- ii) assessment of the adopted procedures;
- *iii)* suitability requirements;
- *iv)* diversity requirements;
- v) rules on the prevention, reporting and remedying of conflicts of interest;
- vi) Assurance that continuous training plan means for the management and supervisory bodies and key functions holders are made available.

<sup>&</sup>lt;sup>2</sup>Started on April 16<sup>th</sup>, 2018

<sup>&</sup>lt;sup>3</sup>Started on September 25th, 2018

The policy on the selection and assessment of members of the management and supervisory bodies and key function holders can be found in Haitong Bank web site.

#### 6 Own Funds

Pillar 3 Own funds disclosures requirements are prepared under the CRR (Regulation (EU) no. 575/2013) and CRD IV (Directive 2013/36/EU), while the 2018 Annual Report is prepared in accordance with IFRSs.

The purpose of the below audited balance sheet as of December 31, 2018, is to provide a full reconciliation of Own funds, filters and deductions applied.

				Carr	ying values of it	tems	(		ands of Euros)
	IFRS Audited Consolidated Balance Sheet 31 Dec 2018	Carrying values under scope of regulatory consolidation	Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisatio n framework	Subject to the market risk framework	Not subject to capital requirement s or subject to deduction from capital	(*)	Balance amounts used for Own funds Prudencial calculations 31 Dec 2018
Assets									
Cash and deposits at central banks	341 255	341 255	341 255	-	-	-	-		-
Financial assets at fair value through profit or loss	641 358	641 358	44 254		-	597 104	-		641,358
Financial assets held-for-trading Securities	597 104 466 957	597 104 466 957	-	130 147	-	597 104 466 957	-	(k)	466,957
Derivatives financial assets	130 147	130 147	-	130 147	-	130 147		()	130 147
Non-trading financial assets mandatorily ar fair						130 147		(14)	130 147
value through profit or loss	44 254	44 254	44 254	-	-	-	-		-
Securities	38 471	38 471	38 471	-	-	-	-	(k)	38 471
Loans and advances to customers	5 783	5 783	5 783	-	-	-	-	(k)	5,783
Financial assets at fair value through other	515 813	515 813	515 813	_	_	_	_	(k)	515 813
comprehensive income								(,	
Financial assets available for sale	722 274	722 274	722 274	-	-	-	-		-
Financial assets measured at amortised cost Securities	<b>722 371</b> 87 085	<b>722 371</b> 87 085	<b>722 371</b> 87 085	-	-	-	-		-
Loans and advances to banks	126 828	126 828	126 828	_	_	_	_		_
Loans and advances to customers	508 458	508 458	508 458		-	-	-		-
Non current assets held-for-sale	2 533	2 533	2 533	-	-	-	-		-
Assets from discontinuing units	213 920	213 920	175 454	30 660	-	38 466	-		-
Other tangible assets	5 364	5 364	5 364	-	-	-			
Intangible assets	18 243	18 243	407	-	-	-	18 243	(i)	18,243
Investments in associated companies	487 172 359	487	487 75 052	-	-	-	97 307		-
Tax assets  Current income tax assets	44 360	172 359 44 360	75 052	-	-	-	44 360		-
Deferred income tax assets	127 999	127 999	75 052	_	_	_	52 947	Σ(n)	52,947
Other assets	261 060	261 060	74 850		-	-	38 097	2(,	-
Total Assets	2,894,763	2,894,763	1,957,433	308,920	0	635,570	153,647		1,175,414
Total Assets	2,034,703	2,034,703	1,337,433	300,320		033,370	133,047		1,173,717
Liabilities									
Financial liabilities held-for-trading	304 873	304 873	-	184 966	-	304 873	-		304 873
Securities  Decirations financial link like	119 907	119 907	-	404.000	-	119 907		٠,	119,907
Derivatives financial liabilities	184 966	184 966	251.042		-	184 966	-	(1)	184,966
Financial liabilites Measured at amortised cost Resources from credit institutions	<b>921 775</b> 358 957	<b>921 775</b> 358 957	<b>251 043</b> 251 043		-	-	<b>670 732</b> 107 914		-
Resources from customers	400 206	400 206	231043	_	_	_	400 206		_
Debt securities issued	162 612	162 612	-	_	-	-	162 612		_
Financial liabilities designated at fair value through									
profit or loss	-	-	-	-	-	-	-		-
Debt securities issued	-	-	-	-	-	-	-		-
Liabilites from discontinuing units	903 169	903 169	-	6 814	-	-	896 355		-
Provisions	15 202	15 202	-	-	-	-	15 202		-
Tax liabilities	3 694	3 694	-	-	-	-	3 694		-
Current income tax liabilities  Deferred income tax liabilities	2 817 877	2 817 877	-	-	-	-	2 817 877		-
Other liabilities	130 544	130 544	_	_	_	_	130 544		_
Total Liabilities	2,279,257	2,279,257	251,043	191,780	0	304,873	1,716,527		304,873
Equity									
Share capital	844 769	844 769						(a)	844,769
Share premium	8 796	8 796						(a)	8,796
Other equity instruments	108 773	108 773						(d)	105,042
Fair-value reserves	( 173)	( 173)						(h)	( 173)
Other reserves and retained income	( 373 847)	( 373 847)						∑(p)	( 373 847)
Net profit/(loss) of the year attributable	1 159	1 159						(c)	1,159
shareholders of the parent company									
					·	·		_	
Total equity attributable to the shareholders of the parent company	589,477	589,477							
• •	<b>589,477</b> 26 029	<b>589,477</b> 26 029						(f)	7,222
parent company								(f)	7,222

 $<sup>(*) \</sup> The \ references \ (a) - (n) \ identify \ balance \ sheet \ components \ which \ are \ used \ in \ the \ calculation \ of \ regulatory \ capital.$ 

**Table 4** – Reconciliation of own funds, filters and deductions

A description of the main components of own funds as of December 31, 2018, is given below.

# **Share Capital**

Until August 3, 2014, the Bank was part of the Banco Espírito Santo, S.A. Group.

On August 3, 2014, the Bank of Portugal decided to apply a resolution measure to Banco Espírito Santo, S.A., the sole shareholder of the Bank, and resolved on the incorporation of Novo Banco, S.A., with a share capital of EUR 4.9 billion, into which the assets of Banco Espírito Santo, S.A. selected by the Bank of Portugal were incorporated. In this context, the Bank and its branches and subsidiaries were transferred to Novo Banco, S.A..

In September 2015, the Bank's entire share capital was acquired by Haitong International Holdings Limited.

In December 2015, the Bank made a EUR 100 million capital increase through the issuance of 20,000,000 shares with nominal value of EUR 5 each, which was subscribed and paid up by Haitong International Holdings Limited.

In May 2017, Haitong International Holdings Limited fully subscribed to the capital increase of Haitong Bank through the conversion into capital of a EUR 20,000,000 shareholder loan.

In May 2017, Haitong International Holdings Limited fully subscribed to the capital increase of Haitong Bank, an investment of EUR 40,000,000 in cash.

In June 2017, Haitong International Holdings Limited fully subscribed to the capital increase of Haitong Bank, an investment of EUR 160,000,000 in cash.

In June 2017, Haitong International Holdings Limited fully subscribed to the capital increase of Haitong Bank through the conversion into capital of a EUR 80,000,000 shareholder loan.

In June 2017, Haitong International Holdings Limited fully subscribed to the capital increase of Haitong Bank through the conversion into capital of a EUR 80,000,000 Fixed Rate Perpetual Deeply Subordinated Additional Tier 1 Resettable Instrument.

In August 2017, Haitong International Holdings Limited fully subscribed to the capital increase of Haitong Bank through the conversion into capital of a EUR 38,500,000 shareholder loan.

# Share premium

The share premiums of EUR 8,796 thousand at 31 December 2018 relates to the premium paid by the shareholders in the capital increase occurred in previous years.

# Other equity instruments

In October 2010, the Group issued subordinated perpetual bonds with conditional interest for a total amount of EUR 50 million. Interest is conditioned and non-cumulative, and payable only if and when declared by the Board of Directors.

This conditioned interest corresponds to the application of an annual rate of 8.5% over nominal value, payable semi-annually. The reimbursement of these securities may be made in full, but not partially, after September 15, 2015, at Haitong Bank's option and subject to the prior approval of the Bank of Portugal.

Given their characteristics, these bonds are considered equity instruments in accordance with the accounting policy described in Note 2.10 of the 2016 Annual Report.

In 2011, a total of EUR 46,269 thousand in other equity instruments was extinguished through the acquisition of own securities.

These bonds are subordinated relative to all liabilities of Haitong Bank and rank *pari passu* with any subordinated bonds with the same characteristics which may be issued by the Bank.

As of December 31, 2017, the amount outstanding of these bonds was EUR 3,731 thousand. In 2017, the Group paid EUR 317 thousand in interest, booked as a deduction to reserves.

In March 2018, the Bank issued perpetual instruments eligible as additional own funds of level 1 (Additional Tier 1), in the overall amount of USD 130,000 thousand, corresponding to 105,042 thousand euros, identified as "Fixed Rate Perpetual Deeply Subordinated Additional Tier 1 Resettable Instruments". Such bonds have a non-cumulative conditional interest which is payable only if and when reported by the Board of Directors. Due to their features, such bonds are deemed to be capital instruments.

The regulation provides for a transitional period to exclude some elements previously included (phase-out) and include/deduct new elements (phase-in) in which institutions may accommodate the new requirements. The transitional period for the majority of the elements will last until the end of 2017, with the exception of the deferred tax assets generated prior to January 1, 2014, and both the subordinated debt and all the hybrid instruments not eligible as own funds under the new regulations, which have a longer transitional period (until the end of 2021).

On December 31, 2018, Haitong Bank's Regulatory Own Funds and deductions were as follows:

Common equity tier 1 (CET1) capital: instruments and reserves  Capital instruments and the related share premium accounts  Retained earnings	(*)	Dec. Fully Loaded		Dec. :	1.7
Capital instruments and the related share premium accounts	(*)	Fully Loaded	DI		
Capital instruments and the related share premium accounts			Phased-in	Fully Loaded	Phased-in
Retained earnings	∑(a)	853 565	853 565	853 565	853 565
	(b)	( 220 722)	( 220 722)	( 200 941)	( 200 941)
Accumulated other comprehensive income (and other reserves)	(b)	( 153 125)	( 153 125)	( 28 272)	( 28 272)
Minority interests (amount allowed in consolidated CET1)	(f)	7 222	7 222	8 154	12 689
Independently reviewed interim net profits net of any foreseeable charge or dividend	(c)	1 159	1 159	( 130 187)	( 130 187)
Common equity tier 1 capital before regulatory adjustments		488 099	488 099	502 321	506 855
Common equity tier 1 capital: regulatory adjustments					
Gains or losses on assets and liabilities held for sale	(h)	( 173)	( 173)	4 798	3 839
Additional value adjustments	(j)	(1339)	( 1 339)	( 1 614)	( 1 614)
Intangible assets	(i)	( 18 583)	( 18 583)	( 21 667)	( 17 333)
Deferred tax assets that rely on future profitability excluding those arising from temporary differences	(n)	( 43 365)	( 43 005)	( 40 273)	( 31 318)
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing		2 161	2 161	5 956	5 956
Deferred tax assets arising from temporary differences (amount above 10% threshold)	(n)	( 9 582)	( 8 923)	( 7 788)	( 4 608)
Qualifying AT1 deductions that exceed the AT1 capital of the institution		-	-	-	( 766)
IFRS9		-	4 847	-	-
Total regulatory adjustments to Common Equity Tier 1 (CET1)		( 70 880)	( 65 014)	( 60 586)	( 45 844)
Common equity tier 1 capital		417 219	423 085	441 734	461 011
Additional Tier 1 (AT1) capital: instruments					
Capital instruments and the related share premium accounts	(d)	105 042	106 534		3 731
Qualifying Tier 1 capital included in consolidated AT1 capital issued by subsidiaries and held by					
third parties	(g)	1 699	1 699	2 127	1 702
Additional tier 1 capital before regulatory adjustments		106 741	108 234	2 127	5 433
Additional tier 1 (AT1) capital: regulatory adjustments					
Regulatory adjustments applied to Additional Tier 1 capital in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase-out		_	_	_	( 1 866)
Residual amounts deducted from Additional Tier 1 capital with regard to deduction from		-		-	766
Common Equity Tier 1 capital during the transitional period				***************************************	
Amounts to be deducted from added to Additional Tier 1 capital with regard to additional filters and deductions required pre- CRR		-	-	-	( 4 333)
Total regulatory adjustments to additional tier 1 capital		-	-	-	( 5 433)
Additional tier 1 capital		106 741	108 234	2 127	-
Tier 1 capital (T1 = CET1 + AT1)		523 961	531 319	443 862	461 011
Tier 2 capital: instruments and provisions					
Capital instruments and the related share premium accounts		-	-	-	-
Qualifying own funds instruments included in consolidated T2 capital issued by subsidiaries	(:)	2.200	3 300	2.026	2 200
and held by third party	(m)	2 266	2 269	2 836	2 269
Tier 2 capital before regulatory adjustments		2 266	2 269	2 836	2 269
Tier 2 capital: regulatory adjustments					
Other AT2 adjustments		( 25)	-	( 25)	( 5)
Total regulatory adjustments to Tier 2 (T2) capital		( 25)	-	( 25)	( 5)
Tier 2 (T2) capital		2 241	2 269	2 811	2 264
Total capital (TC = T1 + T2)		526 201	533 588	446 673	463 275

<sup>(\*)</sup> The references (a) – (n) identify balance sheet components which are used in the calculation of regulatory capital.

#### Table 5 - Own Funds

Table 5 is aligned with Implementing Regulation (EU) No 1423/2013 – Annex IV of December 20, 2013.

Minority interest means the amount of Common Equity Tier 1 capital of a subsidiary of an institution that is attributable to natural or legal persons other than those included in the prudential scope of consolidation of the institution. On December 31, 2018, the Minority Interest adjustments to own funds were as detailed below:

	(*)	Dec. 18	%	Dec. 17	%
Haitong Banco de Investimento do Brasil S.A.		25,913	20%	30,825	20%
SES Iberia		116	50%	256	50%
WindPart, Lda		0	0%	1	80%
Non-Controlling Interest		26,029		31,082	

		Dec.	18	Dec. 17		
	(*)	Fully Loaded Phased-in		Fully Loaded	Phased-in	
Minority interests (amount allowed in consolidated CET1)	(f)	7,222	7,222	8,154	12,689	
Instruments issued by subsidiaries that are given recognition in AT1 Capital (minority Interests)	(g)	1,699	1,699	2,127	1,702	
Instruments issued by subsidiaries that are given recognition in T2 Capital	(m)	2,266	2,266	2,836	2,269	

<sup>(\*)</sup> The references (a) – (n) identify balance sheet components which are used in the calculation of regulatory capital.

Table 6 - Minority Interests' own funds regulatory adjustments

For prudential purposes, Deferred Tax Assets (DTA) has the same meaning as in the applicable accounting framework. On 31 December 2018 and 31 December 2017 the DTA regulatory adjustment was as detailed below:

Amounts in Thousands of Euros) Deducted to Not Deducted Deducted to Not Deducted Dec. 17 Deferred Tax Assets that rely on future profitability 95,627 93,013 Not resulting from temporary differences 0 40,273 43,365 (n) 43.365 40,273 Resulting from temporary differences 52,262 (n) 9,582 42,680 52,740 7,788 44,952 Deferred Tax Assets that do not rely on future profitability 32,371 0 32,371 46,014 46,014 **Total Deferred Tax Assets** 127,999 52,947 75,052 139,027 48,061 90,966

Table 7 – Deferred Tax Assets (DTA) CET1 Regulatory Adjustment

When calculating the amount of their regulatory capital, CRR requires Banks to apply prudent valuation standards to all positions that are measured at fair value. The difference between the values obtained when applying a prudent valuation and the fair value recognized in accounting is known as additional valuation adjustment (AVA), which is directly deducted from the Common Equity Tier 1 (CET1). On December 31, 2018, Haitong Bank's AVA adjustment was as detailed below:

 $<sup>(*) \</sup> The \ references \ (a) - (n) \ identify \ balance \ sheet \ components \ which \ are \ used \ in \ the \ calculation \ of \ regulatory \ capital.$ 

		(				
	(*)	Dec. 18	Dec. 17			
Assets	∑(k)	1,157,171	1,163,222			
Assets Matched Positions		(54,101)	(85,659)			
Liabilities	∑(I)	304,873	620,954			
Liabilities Matched Positions		(69,176)	(84,785)			
Total		1,338,767	1,613,733			
AVA (simplified approach)	(j)	1,339	1,614			

<sup>(\*)</sup> The references (a) – (n) identify balance sheet components which are used in the calculation of regulatory capital.

Table 8 – AVA CET1 Regulatory Adjustment

In order to reduce the impact of IFRS 9 introduction on institutions Own Funds, Regulation (EU) 2017/2395 of the European Parliament and of the Council of 12 December has made possible for institutions to adopt a transitional regime. Pursuant to Article 473a (9) of the CRR, Haitong Bank chose to apply the transitional regime for the "static" and "dynamic" components: (i) the provisioning differential recorded in the first application of IFRS 9 on January 1, 2018; and (ii) the differential registered in assets that are not credit impaired (stages 1 and 2) after the first application of IFRS 9.

Under Regulation (EU) no. 575/2013, Article 437 e), banks are required to describe restrictions applicable to the calculation of own funds. Haitong Bank does not have any restrictions applied to the calculation of own funds.

Under this regulatory framework, the minimum CET1 ratio is 4.5%, the minimum Tier1 ratio is 6% and the minimum Total capital ratio is 8%. In addition, these minimum ratios are supplemented by the capital conservation buffer. CRD IV requirements allow the impact of this buffer to be phased in, beginning on January 1, 2016, in increments of 0.625% per year until it reaches 2.5% of RWAs on January 1, 2019.

Still under the context of CRD IV capital buffer requirements, the Bank of Portugal decided, on November 2016, to impose a capital surcharge to six Portuguese banking groups classified as O-SIIs (Other Systemically Important Institutions) in the scope of its annual revision of the identification of the imposition of capital buffers, pursuant to Article 138-R (2) of the RGICSF. The O-SII buffer will be effective from January 1, 2018, onwards. According to the Bank of Portugal's decision, Haitong Bank was, at this point in time, excluded from the scope of application of this macro prudential buffer.

The regulation also provides a counter-cyclical capital buffer of up to 2.5%, to be imposed in the event that national supervisors deem it necessary in order to counteract excessive credit growth in Portugal. As of January 1, 2019, the Bank of Portugal decided not to impose any additional counter-cyclical capital buffer, by setting a 0% of total risk exposure amount. This decision applies to the first quarter of 2019 and will be subject to a quarterly revision.

On December 31, 2018, Capital ratios were as detailed below:

	Dec	. 18	Dec	. 17
	Fully Loaded Phased-in		Fully Loaded	Phased-in
Risk Exposure	1,848,350	1,848,350	2,173,840	2,173,840
Common equity tier 1	22.6%	22.9%	20.3%	21.2%
Tier 1	28.3%	28.7%	20.4%	21.2%
Total capital	28.5%	28.9%	20.5%	21.3%

Table 9 - Capital Ratios

#### 7 Internal capital adequacy (ICAAP)

The self-assessment process of internal capital adequacy (ICAAP) is carried out every year in accordance with the regulations in force. This self-assessment process aims to ensure that Haitong Bank's capital resources remain sufficient to support the Bank's strategic goals, and to meet regulatory requirements, even in the event of a severe economic downturn stress scenario. The ICAAP's results thus allow the Bank's management to gauge whether the organization's level of capitalization is adequate *vis-à-vis* the risks arising from its activity, and whether the medium-term business plan is sustainable and consistent with the Risk Appetite Policy in place.

The Board of Directors is responsible for the final approval of the ICAAP exercise and its main conclusions. ICAAP is not treated as an isolated process, but one that is incorporated into Haitong's strategic vision and operation management. This way, the Bank ensures not only the flow of relevant information within decision-making units, but also the improvement of risk management on an ongoing basis.

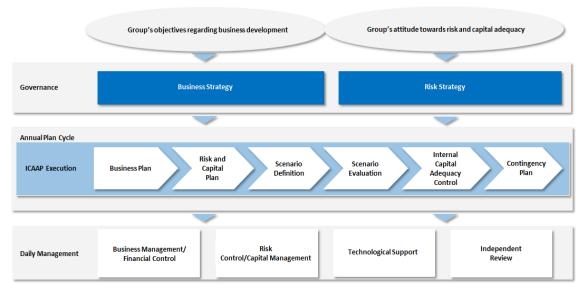


Figure 4 – Integration of the ICAAP in the Bank's management and decision-making process

The ICAAP exercise estimates internal capital requirements for the all material risks of the bank, including Pillar I risks. Material risks are identified by the Board of Directors within the scope of the Risk Appetite Policy, based on a qualitative analysis of the frequency of events associated with each risk and their respective impact. This exercise is based on Haitong Bank's risk taxonomy. The Board of Directors identified the following material risk categories:

Pillar	Risk Categories
Pillar I	Credit Risk CVA Risk (Credit Valuation Adjustment) Market Risk
	Operational Risk
	Credit Concentration Risk
	Interest Rate Risk - Banking Book
Pillar II	Credit Spread Risk
Fillal II	Business Strategic Risk
	Pension Fund Risk
	Reputational Risk

Figure 5 - Haitong Bank's ICAAP Risks

The Bank uses internal models to assess capital requirements for all material risks. These models are approved by the Board of Directors and are subject to validation by the Bank's Internal Audit Department.

Internal capital requirements are assessed both on a static perspective, for the reference date of the exercise, and on a prospective basis, considering the business plan of the Bank for the next three years. This ensures that the strategy pursued by the Bank has adequate capital support.

On a third stage, Haitong Bank subjects the internal capital requirements calculated on a prospective basis to stress scenarios to assess the resilience of the Bank's capital position.

The ICAAP process is embedded in the Bank's regular risk management and a monthly update of the internal capital requirements is calculated for most of the material risks identified.

The table below summarizes Haitong Bank's approach to assessing the adequacy of its internal capital per risk category.

Pillar	Risk type	Key risk methodologies			
	Credit Risk Counterparty Credit Risk (CCR)	IRB Foundation approach			
Pillar 1	CVARisk	Pillar 1 standardized approach.			
	Market Risk	Historical VaR simulation approach			
	Operational Risk	New Standardize Approach introduced under the Basel 3 Dec. 2017 review.			
 Pillar 2	Concentration Risk	Quantified at sectorial, individual and geographical level, based on the Herfindahl Index			
	IRRBB	Historical VaR simulation approach			
	Credit Spread Risk	Historical VaR simulation approach			
	Pension Fund Risk	VaR to stress the mismatch between the fund's assets and the fund's liabilities			
	Business Strategic Risk	Predefined shock over prospective increase of revenues of core business activities			
	Reputational Risk	Based Business Continuity Plan			

Figure 6 – ICAAP Key Risk Methodologies

# 8 Risk weighted assets (RWAs)

On December 31, 2018, and December 31, 2017, Haitong Bank's risk weighted assets (RWAs) and minimum capital requirements under Part Three, Title I, Chapter 1 of the CRR were as follows:

					(Amounts in Tho	ousands of Euros)	
			RW	RWAs		Minimum capital requirements	
			Dec. 18	Dec. 17	Dec. 18	Dec. 17	
	1	Credit risk (excluding CCR)	1,116,624	1,211,373	89,330	96,910	
Article 438(c)(d)	2	Of which the standardised approach	1,116,624	1,211,373	89,330	96,910	
Article 438(c)(d)	3	Of which the foundation IRB (FIRB) approach	-	-	-	-	
Article 438(c)(d)	4	Of which the advanced IRB (AIRB) approach	-	-	-	-	
Article 438(d)	5	Of which equity IRB under the simple risk-weighted approach or the IMA	-	-	=	-	
Article 107,Article 438(c)(d)	6	Counterparty Credit Risk (CCR)	221,687	309,185	17,735	24,735	
Article 438(c)(d)	7	Of which mark to market	-	-	-	-	
Article 438(c)(d)	8	Of which original exposure	-	-	-	-	
	9	Of which the standardised approach	180,206	233,876	14,416	18,710	
	10	Of which internal model method (IMM)	-	-	-	-	
Article 438(c)(d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	-	-	-	-	
Article 438(c)(d)	12	Of which CVA	41,482	75,309	3,319	6,025	
Article 438(e)	13	Settlement risk	1,500	1	120	0	
Article 449(o)(i)	14	Securitisation exposures in the banking book (after the cap)	-	-			
	15	Of which IRB approach	-	-	-	-	
	16	Of which IRB supervisory formula approach (SFA)	-	-	-	-	
	17	Of which internal assessment approach (IAA)	-	-	-	-	
	18	Of which standardised approach	-	-	-	-	
Article 438 (e)	19	Market risk	286,968	406,225	22,957	32,498	
	20	Of which the standardised approach	286,968	406,225	22,957	32,498	
	21	Of which IMA	-	-	-	-	
Article 438(e)	22	Large exposures		-	-	-	
Article 438(f)	23	Operational risk	221,571	247,055	17,726	19,764	
	24	Of which basic indicator approach	-	-	-	-	
	25	Of which standardised approach	221,571	247,055	17,726	19,764	
	26	Of which advanced measurement approach	-	-	=	-	
Article 437(2), Article 48 and Article 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight)	43,339	48,132	3,467	3,851	
Article 500	28	Floor adjustment	-	-	=	-	
	29	Total	1,848,350	2,173,840	147,868	173,907	

Table 10 - RWAs

Table 10 is aligned with EBA Template 4: EU OV1 – Overview of RWAs.

Haitong Bank currently uses the Standardized Approach to calculate risk-weighted assets for Credit Risk.

In the standardized approach, credit exposures are classified within regulatory risk classes according to their characteristics (e.g. type of counterparty, type of product). After making all the adjustments foreseen in Part III, title II of Regulation (EU) no. 575/2013 to the value of these exposures, namely relating to provisions, risk mitigation instruments or credit conversion factors (CCFs), they are assigned the appropriate regulatory risk weights. Risk weights applicable to credit exposures depend on the external ratings assigned to them at any given time.

Haitong Bank uses the external ratings assigned to determine the risk weights applicable to exposures to central governments and central banks, institutions and corporates, in accordance with the rules set out in Regulation (EU) no. 575/2013.

For risk weighting purposes, exposures to debt securities are allocated to the ratings specifically assigned for the respective issues. If no specific rating exist for the issues, the ratings assigned

to the respective issuers, when such ratings exist, are used. Credit exposures other than represented by debt securities are only assigned the rating of the respective issuers, when such ratings exist.

Haitong Bank calculates the own funds requirements for market risk under the standardized approach in accordance with Part Three, Title IV, Chapter 2 of Regulation (EU) no. 575/2013 for its trading book positions and Chapters 3 and 4 for its overall foreign exchange and commodities risk, respectively. For the own funds requirements calculation of the general risk of debt instruments, the Bank uses the Maturity-based approach. For commodities risk, the Bank uses the simplified approach.

On December 31, 2018, and December 31, 2017, Haitong Bank's minimum capital requirements (8% of RWAs) composition was as follows:

(Amounts in Thousands of Euros)

	(Amounts in mou	3333 01 24.03)
	Dec. 18	Dec. 17
1. Capital requirements ( =∑ (1.1 to 1.7))	147,868	173,907
1.1. For credit, counterparty credit and dilution risks and free deliveries ( = 1.1.1 + 1.1.2)	103,746	115,620
1.1.1. Standardised approach (=1.1.1.1+1.1.1.2)	103,746	115,620
1.1.1.1 Standardised Approach exposure classes, excluding securitisation positions	103,746	115,620
1.1.1.1. Claims or contingent claims on central governments or central banks	-	-
1.1.1.1.2. Claims or contingent claims on regional governments or local authorities	425	456
1.1.1.1.3. Claims or contingent claims on Public Sector Entities	-	32
1.1.1.1.4. Claims or contingent claims on multilateral development banks	-	-
1.1.1.1.5. Claims or contingent claims on international organisations	-	-
1.1.1.1.6. Claims or contingent claims on institutions	4,089	11,856
1.1.1.1.7. Claims or contingent claims on corporates	70,687	62,501
1.1.1.1.8. Retail claims or contingent retail claims	-	-
1.1.1.1.9. Claims or contingent claims secured on real estate property	-	-
1.1.1.1.10. Past due items	6,870	15,625
1.1.1.1.1 Items belonging to regulatory high-risk categories	677	1,508
1.1.1.1.12. Claims on covered bonds	-	-
1.1.1.1.3. Claims on collective investments undertakings (CIU)	2,364	2,582
1.1.1.1.14. Other items	18,419	20,678
1.1.1.1.15. Equity positions	214	383
1.1.1.2. Securitisation positions under the Standardised Approach	-	-
1.1.2. IRB approach	-	-
1.2. Settlement risk	120	-
1.3. Capital requirements for position, foreign-exchange and commodities risks ( = 1.3.1 + 1.3.2)	22,957	32,498
1.3.1. Standardised approach ( $=\Sigma(1.3.1.1 \text{ to } 1.3.1.4)$ )	22,957	32,498
1.3.1.1. Traded debt instruments	18,432	21,050
1.3.1.2. Equity	60	2,815
1.3.1.3. Foreign exchange risks	4,373	8,592
1.3.1.4. Commodities risks	93	41
1.3.2. Internal models approach	-	-
1.4. Capital requirements for operational risk	17,726	19,764
1.4.1. Basic indicator approach	-	-
1.4.2. Standard method	17,726	19,764
1.4.3. Advanced measurement approach	-	-
1.5. Capital requirements - Fixed overhead	-	-
1.6. Capital requirements on unilateral adjustm ent of credit evaluation	-	-
1.7. Capital requirements for Credit Valuation Adjustment (CVA)	3,319	6,025

Table 11 – Capital Adequacy – Own Funds Requirements

For the Operational Risk risk-weighted exposures calculation, Haitong Bank applies the Standardized Approach (STA) as set in Article 317 of the Regulation (EU) no. 575/2013.

On December 31, 2017, and December 31, 2018, Haitong Bank's Operational Risk minimum capital (8% of RWAs) composition was EUR 19,764 thousand and EUR 17,726 thousand, respectively.

### 9 Counterparty credit risk

Counterparty credit risk is the risk that a counterparty may default before the settlement of a transaction. It is calculated for over-the-counter derivatives, foreign exchange and securities lending transactions, regardless of whether they are held in the trading or banking book.

Haitong Bank defines limits to counterparty credit risk exposures at counterparty level as a way to mitigate Counterparty Credit Risk (CCR).

Haitong Bank's derivative transactions with financial counterparties are made under ISDA Master Agreements, which include netting clauses. Haitong International Securities Group Limited is a member of ISDA, and, as an affiliate entity, Haitong Bank is entitled to use the legal opinions on validity and enforceability of netting clauses prepared at the request of ISDA for the benefit of its members (and affiliates of its members).

Repo and securities lending transactions are governed by the GMRA Master Agreement prepared by ICMA. Haitong Bank is a member of ICMA and as such is entitled to use the legal opinions on validity and enforceability of netting clauses included in the GMRA prepared at the request of ICMA for the benefit of its members.

To manage the risk exposure to each counterparty, such master agreements (or the relevant collateral support annexes) provide for the collection of margin for trades not cleared through a non-central counterparty. In the case of derivative transactions cleared through a central counterparty, the documentation governing the clearing through the central counterparty is also provided for the provision of margin.

Wrong-way risk occurs when a counterparty's exposure is adversely correlated with its credit quality.

OTC derivatives wrong-way risk with financial counterparties is mitigated through bilateral ISDA contracts with CSA, which require both parties to post collateral to mitigate the other party's counterparty credit risk. This collateral is in the form of cash and as such the Bank does not bear any specific wrong-way risk.

The Bank does not enter into securities lending transactions in which the collateral being provided is issued by the counterparty or its affiliates, and it does not have credit derivatives transactions where there is a legal connection between the risk being covered and the counterparty.

A credit rating downgrade clause in a Master Agreement or a credit rating downgrade threshold clause in a CSA is designed to trigger an action if the credit rating of the affected party falls below a specified level. These actions may include the requirement to pay or increase collateral, the termination of transactions by the non-affected party or the assignment of transactions by the affected party.

The master agreements governing derivatives, repo and securities lending transactions outstanding on December 31, 2018, do not include provisions requiring the posting of additional collateral in a scenario of downgrading of Haitong Bank's credit rating.

Haitong Bank calculates the counterparty credit risk own funds and internal capital of derivative instruments according to the mark-to-market method defined in Part III, Title II, Chapter 6,

Section 3 of Regulation (EU) no. 575/2013, and for repurchase transactions calculates according to the rules defined for the standardized approach in Part III, Title II, Chapter 6, Section 5 of Regulation (EU) no. 575/2013.

Credit Valuation Adjustment ('CVA') risk is the risk of adverse movements in the credit valuation adjustment for expected credit losses on derivative transactions. Haitong Bank applies the standardised approach for the calculation of own funds for CVA risk.

The template below provides an overview of the impact of netting and collateral held for transactions where the exposure value is measured as per Part Three, Title II, Chapter 6 of the CRR, including exposures arising from transactions cleared through a CCP, as of December 31, 2018.

				(Amounts in Th	ousands of Euros)
	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	212,736	42,734	170,002	-	170,002
SFT (Securities Financing Transaction)	615,360	-	615,360	567,184	48,175
Cross-product netting	-	-	-	-	-
Total	828,095	42,734	785,362	567,184	218,177

Table 12 – Impact of netting and collateral held on exposure

Table 12 is aligned with EBA Template 31: EU CCR5-A – Impact of netting and collateral held on exposure values.

On December 31, 2018, Haitong Bank's derivatives exposures to financial institutions amount EUR 74,970 Thousand before netting benefits and EUR 32,369 Thousand after netting benefits.

On December 31, 2018, Haitong Bank's breakdown of CCR Net credit exposure (post CCF and CRM) calculated in accordance with Part Three, Title II, Chapter 6 of the CRR and risk-weights according to Chapter 3 of the same title by risk weight (risk weight assigned according to the standardised approach) was as follows:

										(Amount	s in Thous	ands of Euros)
	Risk Weight											Exposures post
Exposure classes	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	CRM and CCF
Central governments or central banks	1,756	-	-	-	-	-	_	-	-	-	-	1,756
Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral Development Banks	-	-	-	-	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	34,622	17,858	-	-	4,551	-	-	57,031
Corporates	-	-	-	-	-	935	-	-	158,456	-	-	159,391
Retail	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-	-	-	-	-
Total	1,756	-	-	-	34,622	18,793	-	-	163,007	-	-	218,177

Table 13- CCR exposures by exposure class and risk weight

Table 13 is aligned with EBA Template 28: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk.

The comprehensive view of Haitong Bank's methods used to calculate CCR regulatory requirements and its respective main parameters on December 31, 2018, was as follows:

(Amounts in Thousands of Euros) Replacement **Potential future** Notional **EAD post CRM CCR** approach cost/current credit exposure market value Mark to market 154,426 58,310 170,002 153,552 Financial collateral comprehensive 48,175 26,654 method (for SFTs) **Total** 180,206

Table 14 - CCR exposure by approach

Table 14 is aligned with EBA Template 25: EU CCR1 – Analysis of CCR exposure by approach.

On December 31, 2018, OTC derivatives cleared through a qualified central counterparty (QCCP) were immaterial, totalizing EUR 39 million in nominal amount.

On December 31, 2018, the CVA Risk own funds were as follows:

(Amounts in Thousands of Euros)

	Exposure value	RWAs
Total portfolios subject to the advanced method	_	_
(i) VaR component (including the 3× multiplier)	-	-
(ii) SVaR component (including the 3× multiplier)	-	-
All portfolios subject to the standardised method	56,899	41,482
Based on the original exposure method	-	-
Total subject to the CVA capital charge	56,899	41,482

Table 15 - CVA capital charge

Table 15 is aligned with EBA Template 26: EU CCR2 – CVA capital charge.

On December 31, 2018, Haitong Bank's credit derivatives transactions were solely related with intermediation activities. The breakdown of nominal amounts by protection side, bought or sold, within each product group were as follows:

	(Amounts in The	ousands of Euros)
Credit derivatives transactions	Long positions	Short positions
Credit default swaps	-	105,423
Credit linked notes	105,724	-

**Table 16 –** Credit derivatives transactions

10 Geographical distribution of credit exposures relevant for the calculation of countercyclical capital buffer

On December 31, 2018, the geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer were as follows:

						(Amounts in Th	ousands of Euros)
	General credit exposures	Trading book exposures	O	wn funds requirements	;		
Country	Exposures value for SA	Sum of long and short positions of trading book exposures for SA	Of which: General credit exposures	Of which: Trading book exposures	Total	Own funds requirement weights	Countercyclical capital buffer rate
Portugal	1,266,219	16,688	50,182	948	51,130	0.47	0.00%
Brazil	630,506	301,760	13,684	6	13,690	0.13	0.00%
Poland	309,934	33,183	2,529	3,441	5,971	0.05	0.00%
Spain	205,341	5,182	8,366	458	8,824	0.08	0.00%
China	145,927	0	11,653	0	11,653	0.11	0.00%
Italy	103,486	0	330	0	330	0.00	0.00%
Cayman islands	72,564	0	5,805	0	5,805	0.05	0.00%
British Virgin Islands	42,577	0	3,406	0	3,406	0.03	0.00%
United Kingdom	40,631	182	1,068	22	1,090	0.01	1.00%
Luxembourg	23,420	0	1,695	0	1,695	0.02	0.00%
Netherlands	21,019	315	1,682	25	1,707	0.02	0.00%
France	19,856	95	755	8	762	0.01	0.00%
Bermuda	16,229	0	1,078	0	1,078	0.01	0.00%
Mexico	14,124	368	1,129	44	1,173	0.01	0.00%
United States	7,021	-414	112	38	150	0.00	0.00%
Germany	6,069	9	143	0	143	0.00	0.00%
Angola	3,358	0	269	0	269	0.00	0.00%
Belgium	2,052	0	39	0	39	0.00	0.00%
Malta	1,955	0	156	0	156	0.00	0.00%
Chile	315	0	25	0	25	0.00	0.00%
Japan	206	0	3	0	3	0.00	0.00%
Andorra	160	0	13	0	13	0.00	0.00%
Switzerland	108	0	2	0	2	0.00	0.00%
Ireland	36	194	1	16	16	0.00	0.00%
Czech Republic	11	0	0	0	0	0.00	0.00%
Hungary	6	0	0	0	0	0.00	0.00%
Total	2,933,131	357,560	104,124	5,007	109,131	1.00	

**Table 17 –** Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

Table 17 is aligned with EBA Annex I - Table 1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer.

Haitong Bank's specific countercyclical buffer amount is presented below as of December 31, 2018:

(Amounts in Thousands of Euros)

	Dec. 18
Total risk exposure amount	3,290,691
Institution specific countercyclical buffer rate	0.01%
Institution specific countercyclical buffer requirement	329

Table 18 – Amount of specific countercyclical capital buffer

Table 18 is aligned with EBA Annex I - Table 2 - Amount of institution-specific countercyclical capital buffer.

#### 11 Exposure to credit risk and dilution risk

## <u>Definitions of Past Due and Impaired exposures</u>

Past due exposures are those where clients have failed to make payments in more than 30 days of principal, interest or fees in accordance with the contractual terms of their facilities but do not meet the credit impaired criteria described below.

Credit-impaired exposure includes all exposures classified as non-performing exposures ("NPE") in accordance with the European Banking Authority's requirements on the application of the definition of default under Article 178 of Regulation (EU) no. 575/2013, which includes the days past due criteria (over 90-days) and whenever a debtor is assessed as unlikely to pay its debt obligations in full without realization of collateral and regardless the existence of any past due amount or the number of days past due.

# <u>Description of approaches and methods adopted for determining specific and general credit risk</u> <u>adjustments</u>

The Bank follows the predicates of IFRS 9, which replaced the IAS 39 incurred loss model by and an expected credit loss ("ECL") model.

The instruments subject to impairment will be divided into three stages, taking into account their level of credit risk:

- Stage 1 Performing: without significant increase in credit risk from the moment of
  initial recognition. In this case, the impairment will reflect ECL resulting from default
  events that may occur in the next 12 months after the reporting date.
- Stage 2 Under Performing: instruments where a significant increase in credit risk has
  occurred since the initial recognition but for which there is no objective evidence of
  impairment. In this case, impairment will reflect the ECL resulting from default events
  that may occur over the expected residual life of the instrument.

• Stage 3 - Non Performing: instruments for which there is objective evidence of impairment due to events that resulted in losses. In this case, the impairment amount will reflect the ECL over the expected residual life of the instrument.

### **Default Definition**

Under IFRS9, the Bank will consider its financial assets to be in default by applying the same definition that is applied for prudential purposes. Thus, default is defined internally in Haitong Bank by incorporating the following components: (i) material exposures which are more than 90 days past due; or (ii) the debtor is assessed as unlikely to reimburse credit obligations in full, without collateral claim, irrespective of the existence of any overdue instalment or number of days in arrears; and (iii) when 20% of the exposures to a certain debtor are considered to be non-performing, all other exposures to the same debtor should be considered non-performing too ("pulling effect").

In what regards the unlikeliness-to-pay criteria, the Bank addresses the following situations: a) distressed restructurings; b) write-off of interest or principal; c) the Bank sells the credit obligation with a material (more than 5%) credit-related economic loss; d) the obligor has been placed or it is likely that is going to be placed in a bankruptcy and/or insolvency proceeding; and e) when interest related to credit obligations is no longer recognized (non-accrued status) in the income statement (part or under conditionality).

#### Significant increase in credit risk

Under IFRS 9, in order to determine whether there has been a significant increase in credit risk since the initial recognition of the financial instrument, the Group considers all relevant information available at no cost and/or excessive effort.

The Group identifies the occurrence of a significant increase in credit risk exposure through two approaches: (i) quantitative criteria (comparison between the current rating and the rating at the time of contract recognition); and (ii) qualitative criteria through the use of warning signals defined internally. At each reporting date the Bank assesses whether the credit risk of a debtor has increased significantly since initial recognition. Whenever a debtor is considered to have a significant increase in credit risk since initial recognition it is transferred from stage 1 to stage 2.

## Inputs in the measurement of ECL

As a result of the characteristics of the portfolio (reduced number of operations and high heterogeneity), the calculation of the ECL has as the main vector of measurement the individual analysis assessment. In order to complement this analysis, an internal model for calculating collective impairment was developed, based on the following parameters:

- Probability of Default (PD);
- Loss Given Default (LGD);
- Exposure at Default (EAD); and
- Credit conversion factor (CCF).

Given the particularities of the loan portfolio and the impossibility of obtaining relevant historical information, these parameters are obtained through market reference values.

On December 31, 2018, Haitong Bank's total and the average amount of net exposures over the period by exposure class were as follows:

		Origir	nal Exposure Fact	tors <sup>(1)</sup>		(Amounts in Thousands of Euros)  Net Exposure Value (2)						
Exposure classes	On balance sheet exposures	Off balance sheet exposures	Exposures subject to counterparty credit risk	Total exposures subject to credit risk 31 Dec 2018	2018 Average	On balance sheet exposures	Off balance sheet exposures	Exposures subject to counterparty credit risk	Total exposures subject to credit risk 31 Dec 2018	2018 Average		
Central governments or central banks	688 781	-	91 209	779 990	1 040 206	687 008	-	91 199	778 208	1 038 373		
Regional governments or local authorities	3 278	-	-	3 278	3 555	3 063	-	-	3 063	3 332		
Institutions	34 517	39 581	304 094	378 192	501 205	34 169	39 299	304 078	377 546	500 587		
Corporates	689 021	146 641	392 556	1 228 217	1 031 510	678 050	145 884	390 085	1 214 019	1 020 047		
Exposures in default	193 226	3 031	-	196 257	250 046	108 636	2 260	-	110 896	136 147		
Items associated with particular high risk	5 646	-	-	5 646	7 916	5 645	-	-	5 645	7 672		
Collective investments undertakings (CIU)	29 554	-	-	29 554	32 931	29 554	-	-	29 554	32 873		
Equity exposure	3 552	-	-	3 552	3 007	2 679	-	-	2 679	1 908		
Other exposures	402,766	-	-	402 766	345 771	402 766	-	-	402 766	345 771		
Total standardised approach	2 050 342	189 252	787 858	3 027 452	3 216 149	1 951 571	187 443	785 362	2 924 376	3 086 709		

<sup>(1)</sup> Exposure: In accordance with Article 5 of the CRR, exposure refers to an asset or an off-balance-sheet item that gives rise to a credit risk exposure according to the CRR framework.

(2) Net value of the exposure: For on-balance-sheet items, the net value is the gross carrying value of exposure less allowances/impairments. For off-balance-sheet items, the

Table 19 – Total and average net amount of exposures

Table 19 is aligned with EBA Template 7: EU CRB-B – Total and average net amount of exposures.

On December 31, 2018, Haitong Bank's geographic distribution of the exposures by exposure classes was:

							South America	Asia	Other	
Original Exposure Factors	Europe		Poland	Spain		Germany	Brazil	China	geographical areas	Total
Central governments or central banks	589 961	490 740	739	-	98 483	-	188 246	-	-	778 208
Regional governments or local authorities	3 063	=	-	3 063	-	-	-	-	-	3 063
Public sector entities	-	-	-	-	-	-	-	-	-	
Multilateral Development Banks	-	-	-	-	-	-	-	-	-	
International Organisations	-	-	-	-	-	-	-	-	-	
Institutions	35 689	24 485	616	4 519	-	6 069	271 704	325	69 828	377 546
Corporates	838 992	358 910	306 649	101 968	880	70 585	136 875	188 180	49 972	1 214 019
Retail	-	-	-	-	-	-	-	-	-	
Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	
Exposures in default	59 639	4 702	1 940	52 997	-	-	30 008	-	21 250	110 896
Items associated with particular high risk	5 645	5 645	-	-	-	-	-	-	-	5 645
Covered bonds	-	-	-	-	-	-	-	-	-	
Claims on institutions and corporates with a short-										
term credit assessment	-	-	-	-	-	-	-	-	-	
Collective investments undertakings	7 307	3 184	-	-	4 123	-	3 673	-	18 575	29 554
Equity exposures	2 679	2 679	-	-	-	-	-	-	-	2 679
Other exposures	402 766	402,766	-	-	-	-	-	-	=	402 766
Total standardised approach	1 945 740	1 293 110	309 944	162 546	103 486	76 654	630 506	188 504	159 625	2 924 376

**Table 20** – Geographical breakdown of exposures

Table 20 is aligned with EBA Template 8: EU CRB-C – Geographical breakdown of exposures.

On December 31, 2018, Haitong Bank's distribution of the exposures by Industry broken down by exposure classes was as follows:

<sup>(2)</sup> Net value of the exposure: For on-balance-sheet items, the net value is the gross carrying value of exposure less allowances/impairments. For off-balance-sheet items, the net value is the gross carrying value of exposure less provisions.

																		(Amo	ounts in T	housands	of Euros)
Exposure classes	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Manufacture of wood and paper products, and printing	Electricity, gas, steam and air conditioning supply	Water supply	Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Information and communication	Financial service activities, except insurance and pension funding	Insurance, reinsurance and pension funding, except compulsory social security	Activities auxiliary to financial services and insurance activities	Professional, scientific and technical activities	Administrative and support service activities	Public administration and defence, compulsory social security	Human health and social work activities	Arts, entertainment and recreation	Other service	Total
Central governments or central banks	-	-	_	-	-	-	_	-	-	-	-	400 377	-	-		-	377 831		-	-	778 208
Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 063	-	-	-	3 063
Institutions	-	-	-	-	-	-	-	-	-	-	-	366 421	-	11 124	-	-	-	-	-	-	377 546
Corporates	5 446	40 563	43 686	5 560	169 296	73 350	134 311	13 576	208 487	4 395	23 269	246 996	4 404	111 906	105 318	1 249	-	18 059	-	4 147	1 214 019
Exposures in default	1 826	-	15 235	-	-	11 652	34 121	34 053	10 426	-	-	12	-	1 136	937	1 499	-	-	-	-	110 896
Items associated with particular high risk	-	-	-	-	-	-	-	-	-	-	-	5 645	-	-	-	-	-	-	-	-	5 645
Collective investments undertakings (CIU)	-	-	-	-	-	-	-	-	-	-	-	25 431	4 123	-	-	-	-	-	-	-	29 554
Equity	-	-	59	-	-	-	30	15	7	498	-	-	-	2 020	-	-	-	-	50	-	2 679
Other items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	402,766	402,766
Total standardised approach	7 272	40 563	58 980	5 560	169 296	85 002	168 462	47 644	218 921	4 893	23 269	1 044 883	8 527	126 186	106 255	2 748	380 893	18 059	50	406 912	2 924 376

**Table 21** – Concentration of exposures by industry

Table 21 is aligned with EBA Template 9: EU CRB-D – Concentration of exposures by industry or counterparty types.

On December 31, 2018, Haitong Bank's residual maturity breakdown by exposure classes was as follows:

(Amounts in Thousands of Euros) maturity Central governments or central banks 309 178 91 199 377 581 778,208 Regional governments or local authorities 3 063 3,063 Institutions 233 672 42 987 67 372 28 283 5 232 377,546 Corporates 232 497 327 107 210 756 437 614 6 046 1,214,019 Exposures in default 597 18 364 36 524 37 161 18 251 110,896 Items associated with particular high risk 5 645 5,645 Collective investments undertakings (CIU) 29 554 29,554 Equity 2 679 2,679 402,766 Other items 402,766 470 173 2 924 376 Total standardised approach 775 943 479 657 692 233 506 369

Table 22 – Maturity of exposures

Table 22 is aligned with EBA Template 10: EU CRB-E – Maturity of exposures.

On December 31, 2018, Haitong Bank's credit quality of exposures by exposure class and instrument was as follows:

•	-					(Amounts in Tho	usands of Euros)
	Gross carryi	ng values of				Credit risk	Net values
Exposure classes	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	adjustment charges	(a+b-c-d)
Central governments or central banks	-	779 990	-	1 782	-	808	778 208
Regional governments or local authorities	-	3 278	-	215	-	( 14)	3 063
Public sector entities	-	0	-	. 0	-	-	-
Multilateral Development Banks	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-
Institutions	-	378 192	1	. 646	-	110	377 546
Corporates	-	1 228 217	4 401	. 9 797	-	4 921	1 214 019
Retail	-	-	-	-	-	-	-
Secured by mortgages on immovable							
property	-	-	-	-	-	-	-
Exposures in default	196 257	-	85 360	-	( 93 230)	1 742	110 896
Items associated with particular high risk	-	5 646	-	1	-	( 958)	5 645
Covered bonds	-	-	-	-	-	-	-
Securitisation position	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	-	29 554	-	-	-	(4317)	29 554
Equity exposures	21	3 531	-	873	-	( 9 590)	2 679
Other exposures	-	402,766	-	-	-	-	402 766
Total standardised approach	196 278	2 831 174	89 762	13 314	( 93 230)	( 7 299)	2 924 376
Of which: loans to customers	44 006	489 628	19 092	2 422	( 66 231)	( 18 062)	512 119
Of which: debt instruments	10 820	602 523	463	1 827	( 26 998)	( 3 757)	611 054
Of which: assets from discontinuing units	120 652	96 226	51 577	378	-	27 884	164 923
Of which: off-balance	3 031	173 415	1 068	741	-	( 47)	174 636

**Table 23** – Credit quality of exposures by exposure class and instrument

Table 23 is aligned with EBA Template 11: EU CR1-A – Credit quality of exposures by exposure class and instrument.

On December 31, 2018, Haitong Bank's credit quality of exposures by industry or counterparty types was as follows:

•	-				(	Amounts in Thou	usands of Euros)
	Gross carry	ng values of	Specific credit	General credit		Credit risk	Net Values
Industry	Defaulted Non-defaulted risk			risk adjustment	Accumulated write-offs	adjustment charges	(a+b-c-d)
Agriculture, forestry and fishing	2 186	5 570	483	1	-	419	7,272
Mining and quarrying	-	40 745	-	182	-	151	40,563
Manufacturing	15 554	46 382	468	2,488	( 15 566)	( 6 376)	58,980
Manufacture of wood and paper products, and printing	-	5 745	-	184	-	(3)	5,560
Electricity, gas, steam and air conditioning supply	-	173 084	2 280	1,508	( 6 065)	1 683	169,296
Water supply	11 785	74 075	133	725	-	( 3 275)	85,002
Construction	68 371	135 926	34 977	858	-	7 211	168,462
Wholesale and retail trade	37 837	13 739	3 784	148	-	1 711	47,644
Transport and storage	29 265	209 949	19 055	1,238	( 5 777)	2 095	218,921
Accommodation and food service activities	-	5 655	649	112	-	( 774)	4,893
Information and communication	0	23 560	0	291	( 4 106)	( 484)	23,269
Financial service activities, except insurance and pension funding	15 101	1 045 917	15 090	1,046	( 3 969)	( 5 048)	1,044,883
Insurance, reinsurance and pension funding, except compulsory social security	-	8 527	-	0	-	0	8,527
Activities auxiliary to financial services and insurance activities	7 385	126 279	6 228	1,250	( 25 659)	( 6 257)	126,186
Real estate activities	-	153	-	153	-	( 0)	0
Professional, scientific and technical activities	1 172	106 393	341	968	-	( 834)	106,255
Administrative and support service activities	7 622	1 261	6 123	12	( 32 087)	1 655	2,748
Public administration and defence, compulsory social security	-	382 881	-	1,988	-	785	380,893
Human health and social work activities	-	18 182	117	6	-	29	18,059
Arts, entertainment and recreation	-	207	-	157	-	3	50
Other service	-	406 945	33	0	-	10	406,912
Total	196 278	2 831 174	89 762	13 314	( 93 230)	( 7 299)	2 924 376

**Table 24** – Credit quality of exposures by industry or counterparty types

Table 24 is aligned with EBA Template 12: EU CR1-B – Credit quality of exposures by industry or counterparty types.

On December 31, 2018, Haitong Bank's credit quality of exposures by geography was as follows:

•	•				(A	mounts in Thous	sands of Euros)
	Gross carryi	ng values of				Credit risk	Net Values
Country	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	t risk adjustment write-offs adju		adjustment charges	(a+b-c-d)
Europe	94 917	1 895 567	36 500	8 243	( 48 368)	( 9 129)	1 945 740
Portugal	15 919	1 295 058	12 062	5 806	( 16 280)	( 15 824)	1 293 110
Poland	3 553	308 097	1 613	94	-	( 220)	309 944
Spain	75 444	111 498	22 825	1 570	( 32 087)	6 142	162 546
Italy	-	103 563	-	76	-	76	103 486
Germany	-	77 351	-	697	-	697	76 654
South America	33 866	605 628	6 944	2 043	( 36 699)	( 6 155)	630 506
Brazil	33 866	605 628	6 944	2 043	( 36 699)	( 6 155)	630 506
Asia	-	190 021	-	1 517	-	1 441	188 504
China	-	190 021	-	1 517	-	1 441	188 504
Other geographical areas	67 495	139 958	46 317	1 511	( 8 163)	6 544	159 625
Total	196 278	2 831 174	89 762	13 314	( 93 230)	( 7 299)	2 924 376

**Table 25** – Credit quality of exposures by geography

Table 25 is aligned with EBA Template 13: EU CR1-C – Credit quality of exposures by geography.

On December 31, 2018, Haitong Bank's past due exposures were as follows:

(Amounts in Thousands of Euros)

	≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	>1 year
Loans and advances to customers	43 341	-	-	-	-	13 324
Debt securities	-	-	-	929	-	-
Assets from discontinuing units	-	-	-	-	5 991	89 439
Total exposures	43 341	-	-	929	5 991	102 763

**Table 26** – Ageing of past-due exposures

Table 26 is aligned with EBA Template 14: EU CR1-D – Ageing of past-due exposures.

On December 31, 2018, Haitong Bank's non-performing and forborne exposures to debt securities, loans and advances to customers and off-balance sheet exposures were as follows:

									(Am	ounts in Thous	ands of Euros)		
	Gross carrying amount of performing and non-performing exposures					Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received			
		Of which performing but Of which Of which non-performing		On performing exposures		On non-performing exposures		On non-	Of which				
		past due >30 days and <=90 days	performing forborne				Of which forborne		Of which forborne		Of which forborne	performing exposures	forborne exposures
Debt Securities	613 344	-	-	10 820	10 820	1 827	-	463	463	-	-		
Loans and advances to customers	533 633	=	41 244	44 006	44 006	6 077	3 009	15 437	15 482	-	-		
Assets from discontinuing units	216 878	-	10 771	120 652	120 652	828	116	51 127	51 127	40 502	40 502		
Off-balance sheet exposures	176 445	-	23 499	3 031	2 972	1 038	230	770	712	-	-		

**Table 27** – Non-performing and forborne exposures

Table 27 is aligned with EBA Template 15: EU CR1-E – Non-performing and forborne exposures.

On December 31, 2018, Haitong Bank's credit risk adjustments annual movement was as follows:

	(Amounts in Tho	ousands of Euros)	
	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment	
Opening balance	188 776	2 814	
IFRS 9 transition impact	( 13 069)	-	
Increases due to amounts set aside for estimated loan losses during the period	33 491	7 353	
Decreases due to amounts reversed for estimated loan losses during the period	( 9 974)	( 6 486)	
Decreases due to amounts taken against accumulated credit risk adjustments	( 92 747)	( 634)	
Impact of exchange rate differences	( 2 854)	( 423)	
Transfer to discontinued operations	( 55 772)	( 378)	
Other adjustments	-	( 1515)	
Closing balance	47 850	730	
Specific credit risk adjustments directly recorded to the statement of profit or loss	590	-	

Table 28 – Changes in the stock of general and specific credit risk adjustments

Table 28 is aligned with EBA Template 16: EU CR2-A – Changes in the stock of general and specific credit risk adjustments.

On December 31, 2018, changes in Haitong Bank's stock of defaulted loans and debt securities were as follows:

(Amounts in Thousands of Euros) **Gross carrying** value defaulted exposures Opening balance 323 733 Loans and debt securities that have defaulted or impaired since the last reporting period 2 127 Returned to non-defaulted status (4995) Amounts written off (93 230) Transfer to discontinued operations (172 607) Other changes (203) **Closing Balance** 54 826

Table 29 - Changes in the stock of defaulted and impaired loans and debt securities

Table 29 is aligned with EBA Template 17: EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities.

On December 31, 2018, the amount of the impaired exposures and past due exposures broken down by exposure class, country and significant geographical areas were as follows:

(Amounts in Thousands of Euros) Of which: Impaired Past due Exposures Exposures in default 196,257 124,826 85,360 **Total by Risk Classes** 196,278 124,826 85,360 Portugal 15,919 9,648 11,196 Poland 3.553 2.446 1.613 Spain 75,444 66,665 22,448 Brazil 33,866 2,158 3,858 Others 67,495 43,908 46,245 196,278 124,826 85,360 **Total by Country** Agriculture, forestry and fishing 2,186 0 360 319 Manufacturing 15,554 0 Water supply 11,785 0 133 Construction 68,371 38,889 34,251 Wholesale and retail trade 37,837 37,837 3.784 29,265 26,037 18,838 Transport and storage 15,077 15.089 Financial service activities, except insurance and pension funding 15,101 6,228 Activities auxiliary to financial services and insurance activities 7.385 995 Professional, scientific and technical activities 1,172 234 Administrative and support service activities 7,622 5,991 6,123 124,826 85,360 Total by industry or counterparty types 196,278

Table 30 - Additional disclosure related to the credit quality of assets

#### 12 Encumbered and unencumbered assets

With the purpose of keeping the market informed about the liquidity and funding profile of credit institutions and promoting transparency with regard to the encumbrance of assets, Article 443 of Regulation (EU) no. 575/2013 of the European Parliament and of the Council of 26 June 2013 requires the disclosure of information about encumbered and unencumbered assets.

Based on this regulatory framework, on January 15, 2014, the Bank of Portugal issued instruction no. 28/2014, which stipulates that the credit institutions and investment companies listed in Article 4-A (subparagraphs a) to d) of the RGICSF that fall under the scope of Regulation (EU) no. 575/2013 and Directive 2013/36/EU of the European Parliament and of the Council of 26 June (Directive no. 2013/36/EU) are required to provide information on a consolidated basis to the Bank of Portugal and must disclose consolidated information about encumbered and unencumbered assets.

On December 31, 2018, encumbered and unencumbered assets were:

(Amounts in Thous							
Assets	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets			
Assets of the reporting institution	694,784		2,199,979				
Equity instruments	-	-	38,221	38,221			
Debt securities	524,640	524,640	545,464	545,464			
of which: issued by general governments	492,687	492,687	308,883	308,883			
of which: issued by financial corporations	31,953	31,953	40,904	40,904			
of which: issued by non-financial corporations	-	-	195,677	195,677			
Other Assets	170,144	-	1,616,294	-			
of which: Loans on demand	7,227		334,023				
of which: Loans and advances other than loans on demand	-		641,069				
of which: Other assets	162.916		641,203				

**Table 31 –** Asset encumbrance - Template A-Assets

On December 31, 2018, the fair value of the collateral was:

(Amounts in Thousands							
Collateral received	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance					
Collateral received by the reporting institution	104 145	114,158					
Equity instruments	-	-					
Debt securities	104 145	114,158					
of which: covered bonds	-	-					
of which: asset-backed securities	-	-					
of which: issued by general governments	104 145	112,195					
of which: issued by financial corporations	-	1 963					
of which: issued by non-financial corporations	-	-					
Loans on demand	-	-					
Loans and advances other than loans on demand	-	-					
Other collateral received	-	-					
Own debt securities issued other than own covered bonds or ABSs	-	9,507					

Table 32- Asset encumbrance - Template B-Collateral

On December 31, 2018, the liabilities related to encumbered assets and collaterals received were:

(Amounts in Thousands of Euros)

Encumbered assets, encumbered collateral received and matching liabilities

Encumbered assets, encumbered collateral received and matching liabilities

Carrying amount of selected financial liabilities

(Amounts in Thousands of Euros)

Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered

Carrying amount of selected financial liabilities

547,430

791,701

Table 33 - Asset encumbrance - Template C-Sources of encumbrance

Encumbered assets are related with Haitong Bank's funding operations, in particular operations concerning:

- The European Central Bank (ECB) and Brazil Central Bank. ECB funding operations are regulated by Instruction 3/2015 and 1/2016 from Bank of Portugal;
- Repurchase Agreements' transactions where there are Global Master Repurchase Agreements signed between Haitong Bank and each one of its counterparties;
- Initial and variation margins for derivatives where collateral is transferred in line with the Credit Support Annex ('CSA') signed between Haitong Bank and its counterparties;
- Fundo de Garantia de Depósitos (Deposit Guarantee Funds) regulated by the Decree law 176/94, of December 13, 1994, and Bank of Portugal Notice 11/94, December 21, 1994.

#### 13 Use of ECAIs

Haitong Bank uses the Standardized Approach to calculate risk weighted assets for Credit Risk.

In the Standardized Approach, Haitong Bank uses Standard and Poor's (S&P) ratings assigned to determine the risk weights applicable to exposures to central governments and central banks, regional governments or local authorities, public sector entities, multilateral development banks, international organizations, institutions and corporates in accordance with the rules set out in Regulation (EU) no. 575/2013.

The rating assignment methodology uses the rating for each contract and, if non-existent, the rating of the obligor. In case there is no S&P rating available, Haitong Bank applies the CRR rule for non-rating exposures according with the respective exposure class.

On December 31, 2018, the exposure values and the exposure values after credit risk mitigation associated with each credit quality step prescribed in Part Three, Title II, Chapter 2, as well as those deducted from own funds, were as follows:

									(Amounts in	Thousands of Euros)
Exposure classes		Risk Weight								
Exposure dasses	0%	20%	35%	50%	70%	75%	100%	150%	250%	Factors
Central governments or central banks	778,976	-	-	-	-	-	1,013	-	-	779,990
Regional governments or local authorities	-	3,278	-	-	-	-	-	-	-	3,278
Public sector entities	-	-	-	0	-	-	-	-	-	0
Multilateral Development Banks	-	-	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-
Institutions	-	314,919	-	57,440	-	-	5,832	-	-	378,192
Corporates	-	-	-	4 387	-	-	1,200,705	23 124	-	1,228,217
Retail	-	-	-	-	-	-	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-
Exposures in default	-	-	-	-	-	-	120,306	75,950	-	196,257
Items associated with particular high risk	-	-	-	-	-	-	-	5,646	-	5,646
Covered bonds	-	-	-	-	-	-	-		-	
Institutions and corporates with a short-term credit assessment	_						_		_	-
Collective investment undertakings	-	-	-	-	-	-	29,554	-	-	29,554
Equity	_						3,552		_	3,552
Other items	196 725	-	-	-	-	-	162,702	-	43,339	402,766
Total standardised approach	975,701	318,197	-	61,828	-	-	1,523,665	104,721	43,339	3,027,452
					Risk Weight					Exposure post CRM
Exposure dasses	0%	20%	35%	50%	70%	75%	100%	150%	250%	and CCF
Central governments or central banks	728,944	_	_	-	_	_	-	_	_	728,944
Regional governments or local authorities	-	26,574	_	_	_	_	_	_	_	26,574
Public sector entities	_		_	_	_	_	_	_	_	,
Multilateral Development Banks	_	_	_	_	_	_	_	_	_	_
International Organisations	_	_	_	_	_	_	_	_	_	_
Institutions	_	67,858	_	25,718	_	_	5,484	_	_	99,060
Corporates	_	-	_	935	_	_	871,427	11,460	_	883,821
Retail	_	_	_	-	_	_	,	,	_	-
Secured by mortgages on immovable property	_	_	_	_	_	_		_	_	_
Exposures in default	_	_	_	_	_	_	39,553	30,575	_	70,128
Items associated with particular high risk	_	_	_	_		_	-	5,645	_	5,645
Covered bonds	_	_	_	_	-	-	-	3,043	_	-
Institutions and corporates with a short-term credit assessment	_	_	_	_	_	_	_	_		_
Collective investment undertakings		_			_		29,554	_		29,554
Equity	_	_	_	_	_		2,679	-	-	2,679
Other items	196,725	-	=	-	-	-	162,702	-	43,339	402,766
Total standardised approach	925,668	94,432	-	26 653	-	-	1,111,399	47,680	43,339	2,249,171

**Table 34** – Risk Weight by Standardised approach

Table 34 is aligned with EBA Template 20: EU CR5 – Standardised approach.

#### 14 Market Risk

Haitong Bank calculates own funds requirements for market risk under the standardized approach in accordance with Part Three, Title IV, Chapter 2 of Regulation (EU) no. 575/2013 for its trading book positions and Chapters 3 and 4 for its overall foreign exchange risk and according commodities risk respectively. For the own funds requirements calculation for the debt instruments general risk, the Bank uses the Maturity-based approach. For commodities risk, the Bank uses the simplified approach.

On December 31, 2018, and December 31, 2017, Haitong Bank's Market Risk minimum capital (8% of RWAs) composition was as follows:

(Amounts in Thousands of Euros)

Market Risk	Dec. 18	Dec. 17
Capital requirements = Σ(1 to 4)	23,077	32,498
1. Position risk	18,492	23,865
1.1. Standardised approach for trading book =(1.1.1.+1.1.2.)		
1.1.1. Debt Instruments	18,432	21,050
1.1.1.1. Specific Risk	4,974	6,281
1.1.1.2. General risk	13,455	14,755
1.1.1.3. Additional requirements for Options - Non-Delta risk	3	13
1.1.2. Equity	60	2,815
1.1.2.1. Specific Risk	30	1,408
1.1.2.2. General risk	30	1,408
1.1.2.3. Additional requirements for Options - Non-Delta risk	0	0
2. Foreign exchange risk	4,373	8,592
3. Commodity risk	93	41
4. Settlement Risk	120	0

**Table 35** – Market Risk own funds requirements

(Amounts in Thousands of Euros)

	RWAs	Capital requirements
Outright products		
Interest rate risk (general and specific)	230,356	18,428
Equity risk (general and specific)	746	60
Foreign exchange risk	53,574	4,286
Commodity risk	1,163	93
Options		
Simplified approach	=	=
Delta-plus method	43	3
Scenario approach	1,086	87
Securitisation (specific risk)	-	-
Total	286,968	22,957

Table 36 – Market risk under standardised approach (excluding settlement risk)

Table 36 is aligned with EBA Template 34 - EU MR1: Market risk under standardised approach.

## 15 Operational Risk

Operational Risk own funds requirements determined for prudential reporting purposes as of December 31, 2018, were calculated in accordance with the Standardized Approach (Part III, Title III, Chapter 3 of the CRR). In the standardized approach, own fund requirements are computed as the three-year average of the sum of annual own fund requirements for all segments indicated in figure 7.

Business line	List of activities	Percentage (beta factor)
Corporate finance	Underwriting of financial instruments or placing of financial instruments on a firm commitment basis  Services related to underwriting Investment advisory  Advice to undertakings on capital structure, industrial strategy and related matters and advice and services relating to the mergers and the purchase of undertakings Investment research and financial analysis and other forms of general recommendation relating to transactions in financial instruments	18 %
Trading and sales	Dealing on own account  Money broking  Reception and transmission of orders in relation to one or more financial instruments  Execution of orders on behalf of clients  Placing of financial instruments without a firm commitment basis  Operation of Multilateral Trading Facilities	18 %
Retail brokerage  (Activities with natural persons or with SMEs meeting the criteria set out in Article 123 for the retail exposure class)	Reception and transmission of orders in relation to one or more financial instruments  Execution of orders on behalf of clients  Placing of financial instruments without a firm commitment basis	12 %
Commercial banking	Acceptance of deposits and other repayable funds Lending Financial leasing Guarantees and commitments	15 %
Retail banking (Activities with natural persons or with SMEs meeting the criteria set out in Article 123 for the retail exposure class)	Acceptance of deposits and other repayable funds Lending Financial leasing Guarantees and commitments	12 %
Payment and settlement	Money transmission services, Issuing and administering means of payment	18 %
Agency services	Safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management	15 %
Asset management	Portfolio management  Managing of UCITS  Other forms of asset management	12 %

**Figure 7 –** Standardized Approach – Business Segments

The Own Funds requirement is computed for each segment by multiplying the relevant indicator by the beta factor associated to the business segment.

### Calculation of the relevant indicator

In accordance with Regulation (EC) no. 1606/2002 of the European Council and Parliament of July 16, 2002, as transposed into Portuguese law through Decree-Law no. 35/2005 of February 17 and the Bank of Portugal's Notice no. 1/2005, the Bank prepares its separate financial statements in accordance with the International Financial Reporting Standards (IFRS).

The IFRS comprise the accounting standards issued by the International Accounting Standards Board (IASB) and its predecessor body, as well as interpretations issued by the International Financial Reporting Interpretations Committee (IFRIC) and its predecessor bodies.

The relevant indicator is calculated according to Article 316 of Regulation (EU) no. 575/2013 of the European Parliament and Council:

Income Statements	Account
(+) Interest receivable and similar income	79
(-) Interest payable and similar charges	66
(+) Shares and other variable-yield/fixed securities income	82-821
(+) Commissions received	80+81
(-) Commissions paid	67+68
(+) Results from financial operations	[83-(831+833+834)]-[69-(691+693+694)]
(+) Other operating income	[84-(841+842+843)]

**Table 37** – Relevant indicator accounting items

The abovementioned items must reflect the following adjustments, when necessary:

- the relevant indicator must be stated gross of provisions and operating costs, i.e., it must
  be calculated before the deduction of any provisions and operating costs, the latter
  including fees paid to outsourcing services rendered by third parties which are not
  subsidiaries;
- fees paid to outsourcing services rendered by third parties which are subsidiaries or are subject to rules under, or equivalent to, Regulation (EU) no. 575/2013 of the European Parliament and Council contribute to reducing the relevant indicator;
- income from the sale of non-trading book items, extraordinary results or income from insurance are not used in the calculation of the relevant indicator.

	(Amounts in thousand Euros)					
Operational Risk Relevant Indicator	2016	2017	2018			
Standardized Approach	109 960	97 130	110 904			
Corporate Finance	20 747	45 922	52 452			
Trading and Sales	47 469	11 243	20 432			
Retail Brokerage	730	119	600			
Commercial Banking	38 988	34 893	30 186			
Retail Banking						
Payment and Settlement						
Agency Services						
Asset Management	2 027	4 952	7 234			

Table 38 - Operational Risk relevant indicator

Operational Risk own funds requirements determined for prudential reporting purposes, according to information in Table 34, amounted to EUR 17,726 thousand as of December 31, 2018, a decrease of EUR 2,039 thousand when compared to December 31, 2017.

#### 16 Exposures in equities not included in the trading book

The Bank holds positions in shares and risk capital funds in the banking book with the objective of value creation. These include strategic holdings, holdings in companies where the Bank sees an upside potential, equities received as payment in kind for loans and credit converted into equity.

The Bank's banking book exposure in equities is accounted in the investment securities measured at fair value through P&L (FVTPL) portfolio, with changes in value recognized under equity as a separate item - "Fair Value Reserves" — until they are sold or subject to impairment losses.

The methods used to determine fair value emphasize market prices where the securities are listed, whenever available. In the absence of market prices, the Bank uses valuation techniques considered to be the most appropriate for each of the exposures, including the use of recent transactions, when such transactions are known, valuations based on market multiples of entities of a similar nature or valuations carried out by external entities.

The Bank determines that investment securities FVTPL are impaired when there has been a significant or prolonged decline in their fair value. This determination requires a judgment based on the collection and assessment of all available relevant information, including the normal volatility of the financial instruments' prices. For this purpose and considering the high volatility of the markets, the parameter used as impairment trigger for equity securities is the continued or significant decline in their market value against the acquisition cost. In addition, valuations are obtained through mark to market or mark to model that require the implementation of certain assumptions or judgments when estimating fair value. The use of alternative methodologies and of different assumptions and estimates may result in a different level of recognized impairment losses, along with its corresponding impact in the Group's income statement.

								(Amounts i	n Thousand	s of Euros)
	Ouetee			Unquoted shares				. Av	Total	
	Quoted shares –		Private Equity		Others		Other equity instruments			
	Dec. 2018	Dec. 2017	Dec. 2018	Dec. 2017	Dec. 2018	Dec. 2017	Dec. 2018	Dec. 2017	Dec. 2018	Dec. 2017
Acquisition cost/Notional amount	1.220	1.220	9.152	9.152	10.295	2.764	27.768	32.674	48.436	45.810
Fair Value	21	30	2.248	2.196	9.695	2.164	25.800	27.502	37.764	31.892
Market Value	21	30								
Gains or losses arising from sales and liquidations in the period 1									-1.326	43
Total unrealized gains or losses 2									-10.672	1.666
Total latent revaluation gains or losses 3									-10.672	-13.919

Results in the period, before taxes.

Table 39 – Exposures in equities in the banking book

## 17 Exposures to interest rate risk on positions not included in the trading book

The banking book exposure to interest rate risk is calculated in accordance with the Bank for International Settlements (BIS) methodology, which classifies all interest rate sensitive assets,

Difference between the fair value and the acquisition cost on the reporting date.

liabilities and off balance sheet items, excluding those arising from trading, using repricing tenors.

The model used is similar to the duration model, using a stress testing scenario corresponding to a parallel shift of 200 basis points in the yield curve for all interest rate levels (Bank of Portugal Instruction 34/2018).

All financial products which do not have an associated interest return are considered as non-interest rate sensitive (cash, equities, other assets, including real estate, and other liabilities). Non-maturity deposits are considered in the maturity tenor up to one month.

The banking book exposure to interest rate risk is calculated and reported on a quarterly basis.

		(Amounts in Thousands of Euros)			
Interest rate ris	sk (Banking Book)		Dec. 2018	Dec. 2017	
% Own funds		+200 bps	0.27%	4.05%	
% Own funds		-200 bps	-0.15%	-4.05%	
	Total	+200 bps	1,436	18,745	
		-200 bps	-785	-18,745	
	EUR	+200 bps	5,462	23,465	
		-200 bps	-5,126	-23,465	
Value	USD	+200 bps	-3,021	-3,616	
value		-200 bps	3,147	3,616	
	BRL	+200 bps	-360	-1,424	
	DNL	-200 bps	533	1,424	
	Other currencies	+200 bps	-646	319	
	Other currencies	-200 bps	660	-319	

Table 40 –Interest rate risk (banking book)

## 18 Exposure to securitisation positions

As of December 31, 2018, Haitong Bank did not have asset securitization operations originated by the Group.

#### 19 Leverage

Haitong Bank's leverage disclosures were done according the Regulation (EU) 2016/200 of February 15, 2016, which specifies technical standards to be implemented regarding the disclosure of the leverage ratio for institutions, according to Regulation (EU) no. 575/2013 of the European Parliament and of the Council.

Haitong Bank's leverage ratio is defined as the capital measure (given by the amount of Tier 1 capital) divided by the total exposure measure, as defined in Article 499 of Regulation (EU) no. 575/2013, which corresponds to the sum of the exposure values of all of the Bank's assets and off-balance sheet items after adjustments (namely the application of credit conversion factors to off-balance-sheet items or the exclusion of elements deducted to own funds).

The leverage ratio is subject to a period of observation by the supervision authorities so as to permit to monitor the evolution of its components and the behaviour of the ratio relative to the requirements based on each exposure type. A regulatory requirement for the leverage ratio must be maintained from January 1, 2018, onwards. At present, the minimum reference ratio stipulated by the regulatory rules is 3%.

Article 429, no. 11, of Regulation (EU) no. 575/2013 is not applicable to Haitong Bank.

The increase in leverage ratio from 14.98% in 2017 to 18.62% in 2018 is mainly justified by issuance of USD 130 million fixed rate perpetual instruments eligible as additional own funds of level 1 ("Additional Tier 1") and by total assets decrease of EUR 381 million eligible for leverage ratio. As of December 31, 2018, Haitong Bank holds a comfortable leverage ratio (18.62%), compared with the minimum prudential percentage of 3%. Leverage ratio is monitored on a monthly basis, which allows the identification of proper mitigation actions in the case of signs of excessive leverage.

On the tables below is disclosed the breakdown of the total exposure measure, as well as a reconciliation of the total exposure measure with the relevant information disclosed in published financial statements.

(Amounts in Thousands of Euros) **CRR** leverage ratio exposures Dec. 18 On-balance sheet exposures (excluding derivatives and SFTs) 2,491,288 On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral) (67.174)(Asset amounts deducted in determining Tier 1 capital) Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2) 2,424,113 **Derivative exposures** Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin) 154.426 58,310 Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method) EU-5a Exposure determined under Original Exposure Method Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework (Deductions of receivables assets for cash variation margin provided in derivatives transactions) (Exempted CCP leg of client-cleared trade exposures) Adjusted effective notional amount of written credit derivatives (Adjusted effective notional offsets and add-on deductions for written credit derivatives) 10 Total derivatives exposures (sum of lines 4 to 10) Securities financing transaction exposures Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions 615.380 12 (Netted amounts of cash payables and cash receivables of gross SFT assets) (615,380) 13 Counterparty credit risk exposure for SFT asset 48,175 Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429b(4) and 222 of Regulation EU-14a (EU) No 575/2013 Agent transaction exposures EU-15a (Exempted CCP leg of client-cleared SFT exposure) 16 Total securities financing transaction exposures (sum of lines 12 to 15a) 48.175 Other off-balance sheet exposures Off-balance sheet exposures at gross notional amount 189.254 (Adjustments for conversion to credit equivalent amounts) (20.354)168.900 Other off-balance sheet exposures (sum of lines 17 and 18) Exempted exposures in accordance with Article 429(7) and (14) of Regulation (EU) No 575/2013 (on and off balance sheet) (Intragroup exposures (solo basis) exempted in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet) EU-19b (Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet)) Capital and total exposures 531.320 Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b) 2,853,924 21 Leverage ratio 22 Leverage ratio 18.62% Choice on transitional arrangements and amount of derecognised fiduciary items EU-23 Choice on transitional arrangements for the definition of the capital measure Phased-in EU-24 Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013

Table 41 – Leverage ratio

	Dec. 18
Total assets as per published financial statements	2,894,763
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-
(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR")	-
Adjustments for derivative financial instruments	48,753
Adjustments for securities financing transactions "SFTs"	(191,316)
Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	168,900
(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	-
(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013)	-
Other adjustments	(67,176)
Of which Deferred Tax Assets	(51,928)
Of which Goodwill	(10,198)
Of which Other Intangibles Assets	(8,386)
Of which IFSR9	4,847
Of which Others	(1,513)
Total leverage ratio exposure	2,853,924

Table 42 – Summary reconciliation of accounting assets and leverage ratio exposures

The leverage tables 41 and 42 are in line with the Commission Implementing Regulation (EU) No 2016/200 of February 15, 2016.

## 20 Credit risk mitigation techniques

The use of credit protection is a key element of the risk policy and credit decision process, influencing the acceptance criteria, the decision levels, and the pricing.

The main risk mitigation techniques used by the Bank are financial pledges (funded credit protection – financial collateral in the form of securities and cash) and personal guarantees (unfunded credit protection with substitution effect). The calculation of regulatory capital requirements encompasses the effects of the instruments foreseen in Section 2, Chapter 4, Title II, Part III of Regulation (EU) no. 575/2013, namely immovable property collaterals, eligible financial instruments in the Financial Collateral Comprehensive Method, and guarantees provided by sovereigns, financial institutions or entities with external ratings.

Other types of guarantees are also used, which, while not eligible as risk mitigating for purposes of calculating regulatory capital requirements, effectively reduce the credit risk to which the Bank is subject. Because of their broad use, we highlight the personal guarantees provided by company's partners ("shareholders") in certain financing operations.

Haitong Bank follows the prescription of CRR in what concerns collateral haircuts for impairment calculation. Thus, instead of using the collateral value, the Bank considers the collateral value after haircut application.

As of December 31, 2018, Haitong Bank did not have credit derivatives transactions as unfunded credit protection.

The Bank registers in the IT systems the guarantees received connecting them to the guaranteed credit transactions. In what concerns personal guarantees, the Bank registers information about the guarantor, while regarding financial pledges and/or real guarantees the Bank records in the systems specific information about the assets held as collateral.

Frequency and methods of collateral valuation depends on the nature of the collateral. For listed equity securities and debt securities, valuation is done on a daily basis using market prices.

The pledge of bank accounts valuation is done on a quarterly basis according to information provided by the depositary bank.

Regarding pledges over non listed equity securities, pledges over equipment and mortgages valuation, valuation is based on financial information of the borrower or valuation reports made by external independent entities.

The Bank has an internal system with automatic alerts in place aiming the reassessment of the value of collateral. The Bank also carries out the daily monitoring of credits covered by financial collateral in the form of listed companies (e.g.: verification of loan-to-value covenants).

The collateral management primarily relies on Structured Finance Department and on Special Portfolio Management. On the origination, Structured Finance Department is responsible to propose to the Credit Committee/Executive Committee the collateral package of the new transactions, while Special Portfolio Management has this role at the restructuring phase. Both Structured Finance Department and Special Portfolio Management are responsible for the full compliance of the collateral terms approved. These departments shall monitor the valuation and adequacy of existing collaterals, which is a crucial element for the assessment of the expected credit loss both to what concerns the collective and the individual analysis performed at the Impairment Committee.

In what regards derivatives collateral management, please refer to the counterparty credit risk chapter of this document.

On December 31, 2018, in accordance with Part Three, Title II, Chapter 4 of the CRR, including the financial collateral simple method and the financial collateral comprehensive method in application of Articles 222, 223 and 224 of the same regulation on standardised approach capital requirements' calculations and RWA density, Haitong Bank's Credit Risk Mitigation (CRM) techniques applied as follows:

		CREDIT RISK MITIGATION (CRM) TECHNIQUES WITH SUBSTITUTION EFFECTS ON THE EXPOSURE					(Amounts in Credit risk mitigation techniques affecting the amount of the exposure: funded credit protection. Financial collateral comprehensive method			
		protection	ed credit n: adjusted ues	Funded cred	it protection	Substitut exposure o	ion of the lue to CRM	Volatility	(-) Financial	
Exposure Class	Net Exposure Value	(-) Guarantees	(-) Credit derivatives	(-) Financial collateral: simple method	(-) Other funded credit protection	(-) Total Outflows	Total Inflows (+)	adjustment to the exposure	collateral: adjusted value (Cvam)	Exposure post CRM and CCF
Central governments or central banks	778,208	-	-	-	-	-	40,180	-	(89,444)	728,944
Regional governments or local authorities	3,063	-	-	-	-	-	23,511	-	-	26,574
Public sector entities	-	-	-	-	-	-	-	-	-	-
Multilateral Development Banks	-	-	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-
Institutions	377,546	-	-	-	-	-	-	25,530	(272,576)	99,060
Corporates	1,214,019	(23,511)	-	-	-	(23,511)	-	7,900	(238,594)	883,821
Retail	-	-	-	-	-	-	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-
Exposures in default	110,896	(40,180)	-	-	-	(40,180)	-	-	-	70,128
Items associated with particular high risk	5,645	-		-	-		-	-	-	5,645
Covered bonds	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short- term credit assessment	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	29,554	-	-	-	-	-	-	-	-	29,554
Equity	2,679	-	-	-	-	-	-	-	-	2,679
Otheritems	402,766	-	-	-	-	-	-	-	-	402,766
Total	2,924,376	(63,691)	-	-	-	(63,691)	63,691	33,429	(600,614)	2,249,171

**Table 43** – Credit risk mitigation techniques

•	. (Amounts in Thousands of			
	Unfunded Cred	Unfunded Credit Protection		
Industry	Guarantees	Credit derivatives	Funded Credit Protection	
Manufacturing	10,899	0	0	
Construction	6,449	0	0	
Wholesale and retail trade	34,053	0	4,553	
Financial service activities, except insurance and pension funding	0	0	586,983	
Insurance, reinsurance and pension funding, except compulsory social security	0	0	3,453	
Activities auxiliary to financial services and insurance activities	0	0	5,626	
Human health and social work activities	8,482	0	0	
Other service	4,311	0	0	
Total	64,195	0	600,614	

Table 44 – Credit Protection Concentration

Table 45 shows the effect of prudential mitigations and its respective risk exposures by risk class according with Part III, Title II, Chapter 4 of CRR regulation as of December 31, 2018.

(Amounts in Thousands of Euros)

					(Faribulia III I	nousunus or Euros)	
	Exposures before CCF and CRM (Net Exposure Value)		Exposures pos	t CCF and CRM	RWAs and RWA density		
Exposure classes	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density	
Central governments or central banks	687,008	=	727,345	-	-	0.00%	
Regional governments or local authorities	3,063	-	26,574	-	613	0.03%	
Public sector entities	-	-	-	-	-	0.00%	
Multilateral Development Banks	-	-	-	-	-	0.00%	
International Organisations	=	-	-	-	-	0.00%	
Institutions	34,169	39,299	34,169	7 860	11,510	0.57%	
Corporates	678,050	145,884	654,539	69 891	729,094	35.90%	
Retail	-	-	-	-	-	0.00%	
Secured by mortgages on immovable property	-	-	-	-	-	0.00%	
Exposures in default	106,663	2,307	66,327	1 718	85,870	4.23%	
Exposures associated with particularly high risk	5,645	-	5,645	-	8,468	0.42%	
Covered bonds	-	-	-	-	-	0.00%	
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	0.00%	
Collective investments undertakings (CIU)	29,554	-	29,554	-	29,554	1.46%	
Equity	2,679	-	2,679	-	2,679	0.13%	
Otheritems	404,692	-	404,692	-	230,242	11.34%	
Total	1,951,524	187,490	1,951,524	79,469	1,098,030	54.06%	

**Table 45**– Standardised approach – Credit risk exposure and CRM effects

Table 45 is aligned with EBA Template 19: EU CR4 – Standardised approach – Credit risk exposure and CRM effects.

Table 45 does not cover derivative instruments, repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions subject to Part Three, Title II, Chapter 6 of the CRR or subject to Article 92(3) point (f) of the same regulation.

#### 21 Liquidity Risk

Liquidity risk arises from an institution's present or future inability to meet all payment obligations when they come due or the ability to secure such resources only at excessive cost.

Within the scope of the risk vision statement approved by the Board of Directors, Haitong Bank as whole and all its subsidiaries individually, aim to maintain a solid short-term position and a sustainable medium and long-term funding profile.

To achieve these goals, Haitong Bank's liquidity management has the objective of ensuring the Bank is able to meet its obligations as they come due at a reasonable cost, while complying with regulatory requirements across all geographies where it operates.

Haitong Bank seeks to develop a diversified investors' base, ensuring access to alternative financing sources and instruments and keeping an adequate funding structure to finance its activity.

To manage its liquidity risk, Haitong Bank monitors a set of liquidity risk metrics, whose limits were established within the Risk Appetite Framework, including prudential liquidity ratios, for which a buffer above regulatory limits was established, to cope with the risk level defined in the risk vision statement.

The liquidity risk metrics evolution and an analysis of the high quality liquid assets stock is included the monthly risk reporting package – Risk Appetite Monitoring – discussed in the Executive Committee, the Risk Committee and the Board of Directors.

The Internal Liquidity Adequacy Assessment Process (ILAAP) is an assessment on the adequacy of the institution's short-term liquidity position and of the stable funding structure and an important part of the Bank's liquidity risk management framework. Within the context of the ILAAP exercise, the Bank tests the soundness of its liquidity position through a set of stress scenarios and establishes contingency plans to address them.

Haitong Bank's liquidity and funding management is under the direct responsibility of the Executive Committee, coordinated at Group level, under the ultimate responsibility of the Chief Executive Officer (CEO) and operational management by the Global Coordinator of Treasury.

Haitong Bank has two main treasury hubs: Lisbon and São Paulo. Additionally, Poland also has a treasury department located in Warsaw, dealing with the specifications of the local market, local currency and the Polish regulatory/supervising authority. While Lisbon and São Paulo deal with the bulk of the Bank's funding and liquidity needs, Warsaw volumes and activity are less material and have a lower weight in the overall business of the Bank. Although representing a sizeable part of the Bank's balance sheet, the Irish subsidiary is managed on an integrated basis from Lisbon.

Funding from the parent company to the Brazilian subsidiary is at this point non-existent and, although we cannot rule out some sort of assistance when or if needed, it is not considered a regular source of funding. Thus, the Brazilian subsidiary manages its activity in order to ensure that the funding needs are sourced locally in local currency. As a result, the flows between Portugal and Brazil are extremely rare. Local market idiosyncrasies and the lack of full convertibility of the BRL are the main reasons for this historical segregation.

In 2018, Haitong Bank's major sources of funding were wholesale facilities provided by financial institutions, securities issued and deposits from clients, with the bank using repo markets to fund short term positions especially in Brazil. At the end of 2018, the major funding provider accounted for 14% of the total funding. Deposits from clients include both retail deposits and other deposits from corporate clients and financial institutions.

High quality liquid assets of Haitong Bank consist mainly of deposits in central banks (Bank of Portugal) and sovereign debt from European Union countries and Brazilian treasuries held by the Brazilian subsidiary.

Haitong Bank hedges the market risk of its exposure to derivatives with its clients by taking opposite positions with financial counterparties, which are covered by ISDA/CSA agreements and imply the exchange of collateral margin. In market stress situations where the value of derivatives is significantly impacted, additional collateral amounts can be demanded from Haitong Bank.

The Brazilian subsidiary's funds are mainly raised in the local currency and thus there is very little foreign currency funding. Excluding Brazil, the main funding currency is EUR, except for the Warsaw subsidiary, which is mostly funded locally in PLN.

The bulk of Haitong Bank's foreign currency funding is done in Haitong Lisbon and although from time to time the Bank may raise funds directly in that foreign currency via deposits and in small amounts, the standard practice is to swap EUR (the main funding currency) into the desired currency.

The majority of the swaps to fund the foreign currency activity of the Bank are the EUR/USD pair, with all other currencies having a residual impact on the amount of funds raised. Given the

depth of the market and the sheer volumes traded on a daily basis, Haitong needs are minimal and as such it is considered that convertibility and availability risks are negligible.

## Haitong Bank Liquidity Coverage Ratio (LCR)

The Liquidity Coverage Ratio (LCR) represents the amount of unencumbered high quality liquid assets, after haircuts, over the stressed net cash outflows for the following 30 days.

Haitong Bank's LCR average annual figures per quarter for 2018 are presented in the table below:

(Amounts in Thousands of Euros)

	LCR Consolidated	Total weighted value (average)					
Quarter ending on		31/03/2018	30/06/2018	30/09/2018	31/12/2018		
Number of data points used in the calculation of averages		12	12	12	12		
21	LIQUIDITY BUFFER	684 581	742 333	736 824	732 399		
22	TOTAL NET CASH OUTFLOWS	114 860	104 294	105 608	116 172		
23	LIQUIDITY COVERAGE RATIO (%)	647%	763%	739%	677%		

Table 46 - LCR disclosure table

As shown by Table 46, Haitong Bank has maintained a very solid short-term liquidity position in 2018, with its unencumbered high quality liquid assets covering the net cash outflows, and with the ratio sitting comfortably above the regulatory minimum requirements of 100%.

#### 22 Remuneration Policy

Regarding Haitong Bank's remuneration policy and practices for those categories of staff whose professional activities have a material impact on its risk profile ("Identified Staff"), information is disclosed in the Remuneration Policy of the Board of Directors and Supervisory Board, in Remuneration Policy of Identified Staff of Haitong Bank, S.A. and in the Annual Report. References to these documents are shown below, together with complementary information, where appropriate:

 a) information concerning the decision-making process used for determining the remuneration policy, as well as the number of meetings held by the main body overseeing remuneration during the financial year, including, if applicable, information about the composition and the mandate of a remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders;

Remuneration Policy of the Board of Directors and Supervisory Board – **Sections II, III** and IV

Remuneration Policy of Identified Staff – Sections III and IV

The Remuneration Committee held **three meetings in 2018** (Haitong Bank's 2018 annual report, "Corporate Governance Report", section II "Corporate Bodies and Committees").

b) information on the link between pay and performance

Remuneration Policy of the Board of Directors and Supervisory Board – **Sections VI, VI.II,** e) and h)

Remuneration Policy of Identified Staff - Sections I, IV.10 e)

 the most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria

Remuneration Policy of the Board of Directors and Supervisory Board – Parts II, VI.II b), c), d), e) and h)

Remuneration Policy of Identified Staff - Parts VI, VIII and IX

d) the ratios between fixed and variable remuneration set in accordance with Article 94(1)(g) of Directive 2013/36/EU

Remuneration Policy of the Board of Directors and Supervisory Board – Part VI, VI.2, b) and c)

Remuneration Policy of Identified Staff - Part V

e) information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based

Remuneration Policy of the Board of Directors and Supervisory Board – Parts II, VI.II a) Remuneration Policy of Identified Staff – Part IV.10 e)

f) the main parameters and rationale for any variable component scheme and any other noncash benefits

Remuneration Policy of the Board of Directors and Supervisory Board – Parts II, VI.II Remuneration Policy of Identified Staff – Parts III, IV, VII, VIII, IX

g) aggregate quantitative information on remuneration, broken down by business area

(Amounts in Thousands of Euros)

Business Area / Department	Remunerations
Structured Finance	1 082
Capital Markets	1 276
Fixed Income, Currency and Commodities	2 227
M&A Advisory	3 538
Asset Management	623
Private Equity	711
Equities & Research	1 681
Global Markets	1 136
Treasury	438
Wealth Management	2
Control Areas	2 933
Support Areas	16 887
Total	32 536

Table 47 – Aggregate quantitative remuneration by business area

- h) aggregate quantitative information on remuneration, broken down by senior management and members of staff whose actions have a material impact on the risk profile of the institution, indicating the following:
  - (i) the amounts of remuneration for the financial year, split into fixed and variable remuneration, and the number of beneficiaries;

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	(Amounts in Thousands of Euros)						
	Fixed Remuneration	Variable Remuneration	# Beneficiaries				
<b>Board Members</b>	1 643	0	5				
<b>Identified Staff</b>	3 937	160	27				

Table 48 – Aggregate remuneration and number of beneficiaries

(ii) the amounts and forms of variable remuneration, split into cash, shares, share-linked instruments and other types

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In 2018 all remuneration was in cash.

(iii) the amounts of outstanding deferred remuneration, split into vested and unvested portions

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(iv) the amounts of deferred remuneration awarded during the financial year, paid out and reduced through performance adjustments

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(v) new sign-on and severance payments made during the financial year, and number of beneficiaries of such payments

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(vi) the amounts of severance payments awarded during the financial year, number of beneficiaries and highest such award to a single person

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i) the number of individuals being remunerated EUR 1 million or more per financial year, for remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500 000 and remunerations of EUR 5 million and above broken down into pay bands of EUR 1 million

No individual was remunerated EUR 1 million or above in 2018 financial year.

 Upon demand from the Member State or competent authority, the total remuneration for each member of the management body or senior management

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