11. Operational risk

As at 31 December 2020 and 2019, the Group calculated the own funds requirements for operational risk in accordance with the standard approach, pursuant to the authorisation granted by Banco de Portugal, as previously mentioned.

The computation of the own funds requirements results from the application of a set of weights to the components of gross income that refer to the activity segments, according to the regulatory definitions.

The framework for this calculation is provided by Title III of Regulation (EU) 575/2013 (CRR), also considering additional clarifications received from Banco de Portugal, namely, with respect to the accounting items considered in the determination of the gross income.

11.1. Gross income

The gross income results from the sum of the net interest income, dividends received (except the income from financial assets with an "almost capital" nature – shareholders' advances), net commissions, profits and losses arising on financial transactions associated to trading operations and other operating income. From these last items, the following are excluded: those that result from the sale of shareholdings and other assets, those with reference to discontinued operations and those resulting from negative consolidation differences. The interest in arrears recovered and expenses, which, on a consolidated basis, is recorded in the reversions of impairment losses item, is also added to the gross income.

Yet, neither the compensations received as a result of insurance contracts nor the revenues from the insurance activity are added to the value of the gross income. Finally, the other operating expenses cannot contribute to the reduction of the gross income value, with exception of the costs resulting from outsourcing provided by external entities to the Group or by entities that are not subject to the provisions of CRR.

The values thus obtained for the above-mentioned items are adjusted by the non-current amounts of the activity that are eventually still included in the gross income.

11.2. Operational risk – standard approach

The own funds requirements calculated in accordance with the standard approach are determined by the average, over the last three years, of the sum of the risk weighted gross income, calculated each year, relative to the activity segments and the risk weights that are defined in article 317 of CRR, whose scope corresponds in general terms to the following:

- Corporate Finance (subject to an 18% weight): underwriting activities and related services, investment analysis and other financial consulting activities.
- Trading and Sales (subject to an 18% weight): dealing on own account and intermediation activities in monetary and financial instrument markets.
- Retail Brokerage (subject to a 12% weight): placement of financial instruments without a firm underwriting and intermediation of orders relative to financial instruments, on behalf of private Customers and small businesses.
- Commercial Banking (subject to a 15% weight): taking deposits and credit and guarantee concession and undertaking other commitments to companies.
- Retail Banking (subject to a 12% weight): taking deposits and credit and guarantee concession and undertaking other commitments to private Customers and small businesses.
- Payment and Settlement (subject to an 18% weight): payment operations and issue and management of means of payment activities.
- Agency Services (subject to a 15% weight): services associated to the safekeeping and administration of financial instruments.
- Asset Management (subject to a 12% weight): investment fund and individual portfolio management activities.

The gross income by activity segments, on a consolidated basis, resulted from the aggregation of the values obtained for the perimeters of Portugal and of each one of the Group's foreign operations, determined based on homogeneous criteria and common to all geographies.

The gross income by activity segments for Portugal and Poland was calculated based on their financial statements, complemented with information collected from their management information systems, whereas for the other foreign operations, accounting information was used. With respect to the subsidiary in Poland, the entire calculation process was conducted locally, taking into consideration that it is an operation with a diversified activity, which requires the contribution of own management information systems. On the other hand, the remaining foreign subsidiaries, which have a standardised activity concentrated in the Retail segment, were treated centrally.

The gross income segmentation of the activity in Portugal and Poland was based on information by business segments, produced for the purposes of internal management and market disclosure. In a first phase, the business segments and operational risk segments that present the greatest perimeter similarities were identified. Subsequently, the necessary transfers between the various segments, of zero sum, were carried out, to achieve a perimeter in line with what is required for the purposes of operational risk, in each segment.

In addition, the calculation of the gross income by activity segments for the Group's foreign operations, excluding Poland, was based on the financial statements of each subsidiary, as previously mentioned. Bearing in mind that these subsidiaries develop a retail activity, they were allocated, in a first phase, to the Retail Banking segment, with exception of the values recorded in the profits and losses arising on financial transactions item, which, by its nature, are immediately placed in the Trading and Sales segment, and subsequently the transfers for achieving a segmentation in line with the defined perimeter for the gross income are carried out. On 31 December 2020, this calculation was carried out for the operations of Switzerland, Mozambique and of Millennium bcp Bank & Trust, with registered office in the Cayman Islands, in addition to Bank ActivoBank, which, although it develops its activity in Portugal, verifies the same assumptions and, thus, follows the same methodology.

Having concluded these procedures and the consolidation of the Group's activities, the segmented gross income was obtained in conformity with the requirements defined for the purposes of operational risk, to which the calculation methodology and the previously mentioned weights were applied, and the respective capital requirements were obtained.

As at 31 December 2020, the Group reported around 321 million euros of own funds requirements for operational risk, having reported 325 million euros as at 31 December 2019, computed with the data presented on Table 79.

TABLE 79 – OPERATIONAL RISK OWN FUNDS REQUIREMENTS AND RISK-WEIGHTED EXPOSURE AMOUNTS

(Thousand euros)

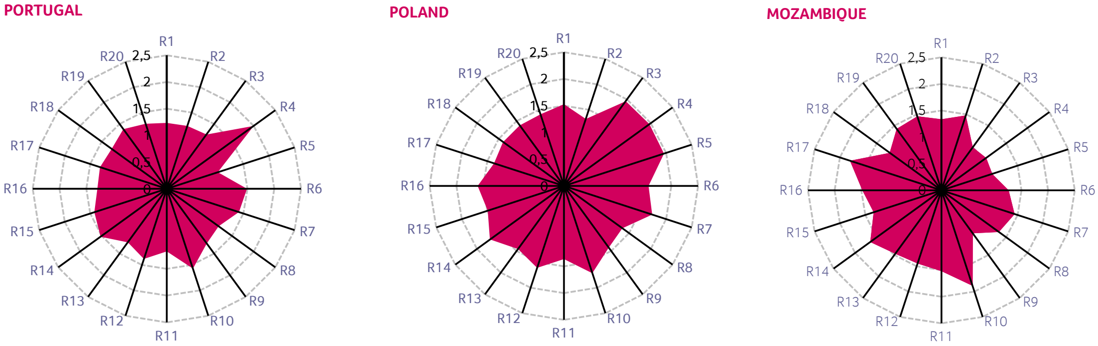
Segments	Gross income			Own funds requirements	Risk-weighted exposure amounts
	2018	2019	2020		
1. BASIC INDICATOR APPROACH	-	-	-	-	-
2. STANDARD APPROACH	2 309 531	2 503 407	2 363 363	321 150	4 014 374
- Corporate finance	17 941	10 757	20 603		
- Trading and sales	93 915	244 627	257 175		
- Retail brokerage	19 428	15 596	24 492		
- Commercial banking	522 738	566 581	481 313		
- Retail banking	1 545 984	1 533 620	1 469 054		
- Payment and settlement	79 583	82 735	76 661		
- Agency services	15 963	36 643	18 554		
- Assets management	13 980	12 849	15 511		
3. ADVANCED MEASUREMENT APPROACH	-	-	-	-	-

11.3. Operational risk management

Operational risk management is based on an end-to-end process structure, defined for each of the Group's subsidiaries, and the responsibility for their management was given to process owners, who must: characterise operational losses captured within their processes; carry out the Risk Self-Assessment (RSA); identify and implement the appropriate measures to mitigate exposures, contributing to reinforce internal control; and monitor key risk indicators (KRI).

The following graphs show the results of the latest RSA made in Portugal, Poland and Mozambique in terms of the average score of each of the 20 risk sub-types defined for operational risk within the set of processes assessed. The outside border represents a 2.5 score on a scale of 1 (less serious) to 5 (most serious).

GRAPH 3 – RISKS SELF-ASSESSMENT RESULTS

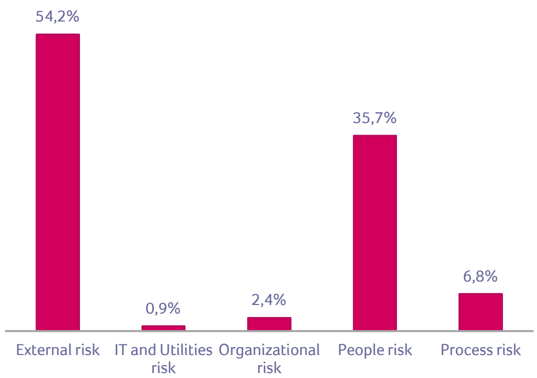


R1 Internal fraud and theft
R2 Execution of unauthorised transactions
R3 Employee relations
R4 Breach of work health & safety regulations
R5 Discrimination over employees
R6 Loss of key staff
R7 Hardware and Software problems
R8 Problems related to telecom services & lines
R9 Systems security
R10 Transaction, capture, execution & maintenance
R11 Monitoring and reporting errors
R12 Customer related errors
R13 Product flaws/errors
R14 External fraud and theft
R15 Property and disasters risks
R16 Regulatory and tax risks
R17 Inappropriate market and business risks
R18 Project Risks
R19 Outsourcing related problems
R20 Other third parties' related problems

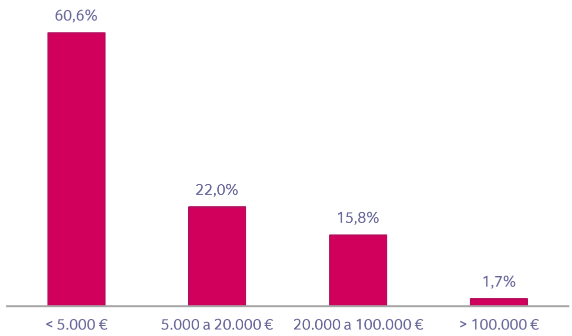
The operational losses identified are registered in the Group's operational risk application and connected with the respective process, being assessed and characterised in accordance to their nature. When applicable, a mitigation action is associated with each loss event.

The following graphs feature the profile of accumulated operational losses in 2020.

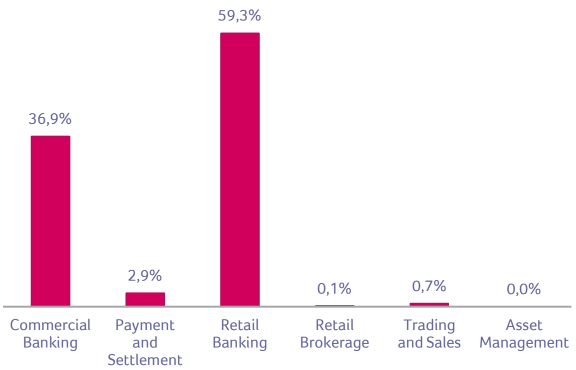
GRAPH 4 – LOSS AMOUNT DISTRIBUTION, BY CAUSE



GRAPH 5 – LOSS AMOUNT DISTRIBUTION, BY AMOUNT RANGE



GRAPH 6 – LOSS AMOUNT DISTRIBUTION, BY BUSINESS SEGMENT



A set of KRI is used by the Group's various operations to monitor the processes risks. These KRI are management instruments represented by metrics that aim at the identification of changes in risk profiles and in controls effectiveness, so as to act preventively and avoid turning potential risk situations into actual losses. Within the process's management, a set of performance and control indicators is also used (Key Performance Indicators and Key Control Indicators) contributing to the detection of risks, even though it is more oriented towards the assessment of operating efficiency.

The Scenario Analysis is an exercise in which all of the macro process owners participate, as well as the heads of selected Divisions, aiming at the impact assessment of extreme and relevant events - potential risks of high severity (low frequency/high impact) – even if this type of events has never occurred at the Bank. The results of this exercise are integrated in the losses estimation model that was developed for the ICAAP and this data is also used for risk management and mitigation, thus contributing to the reinforcement of the internal control environment.

In 2020, the usual activities of operational risk management continued to be carried out by the various intervenient, aiming at an efficient and systematic identification, evaluation, mitigation and control of exposures, as well as the reporting duties' tasks, both to the Group management bodies and within the regulatory scope.

In addition, the Bank's mobilization to reinvent the banking experience, based on new technologies, presents significant challenges in operational risk management, with highlights on: strengthening the security of digital banking channels, strengthening the mechanisms for prevention and detection of potential fraud, the responsible management of personal data and the fulfilment of the legally prescribed information duties in selling through digital banking channels.

Among the actions carried out in 2020 with the aim of strengthening the mechanisms for controlling and measuring operational risks, the following should be highlighted:

- The presentation of the results of the RSA exercise carried out in 2019 for the set of operational processes and the execution of the same year of 2020.
- Calculation and presentation of the results of the RSA exercise for ICT risks (ICT - Information and Communication Technology).
- Adaptation and reinforcement of the outsourcing risk monitoring framework.

In parallel, the Group continued to strengthen and improve its business continuity management throughout 2020, with a focus on the updating of existing strategies, procedures and documentation, conducting regular business recovery simulations, technological recovery and crisis management exercises in order to improve its emergency response capacity, in articulation with all the teams involved in its different phases.

This area aims at ensuring the continuity of the business activities (or business support activities) in case of catastrophe or major contingency and is addressed by the Group through two distinct but complementary aspects:

- The Disaster Recovery Plan, for communication systems and infrastructures; and
- The Business Continuity Plan, for people, premises and equipment required for the minimum support of selected processes, deemed critical.

It should be noted that the management of this specific operational risk area is designed, promoted and coordinated across the Group by a specific structure unit.

In addition, the Group maintains an insurance contracting policy as an instrument to mitigate potential financial impacts associated with the occurrence of operational risks, by transferring, partially or in full, the risks pertaining to assets, people or liabilities before third parties.

The proposals for new insurances are submitted by the process owners, within the scope of the operational risk management powers regarding their processes, or presented by the heads of areas or structure units, being analysed by the Compliance and Operational Risks Commission and subject to a decision by the EC.

11.4. Operational risk within the covid-19 pandemic context

The year 2020 was marked by the covid-19 pandemic, an unprecedented global contingency situation that significantly affected all the Group's activities.

In this context, the Group's operational capability, together with the protection of Customers and Employees, was ensured through the activation of contingency plans for business continuity, which implied the extensive use of teleworking - with considerable reinforcement of the IT and communications infrastructure in Portugal , in addition to specific measures and increased vigilance in systems' security - the distribution/installation of protective materials and rules for occupation and dislocations within the premises, through the use of appropriate signage.

From the transactional point of view, it is also important to highlight the impact - translated into operational effort and increased operational risk - that the moratoriums on loans granted to individuals and companies (as well as credit lines with mutual guarantee covered by the State, in Portugal) implied from the end of the first quarter of 2020. In the domestic operation, this impact was mitigated through the introduction, in a very short time, of automatic and massified processing mechanisms that ensured an operational response that was not only effective, but also robust (from the point of view of controlling the risk of errors) in the processing of operations).

Finally, it should be noted that, within the appropriate framework2 ((and even if this does not affect the calculation of regulatory capital requirements for operational risk), the extraordinary costs resulting from the pandemic and from the need to maintain the Bank's operational capability, were recorded as operating losses, amounting to c. 5.7 M € on 31/12/2020 (amount for Portugal, Poland and Mozambique), relating to the reinforcement of IT infrastructure to support massive teleworking, to protective materials and signage of the installations, to personal protective consumables (masks, disinfectant gel, gloves) and extraordinary costs for cleaning and disinfecting the premises and branches.

[2] EBA REPORT ON THE IMPLEMENTATION OF SELECTED COVID-19 POLICIES (EBA/REP/2020/19)