BASEL 3
PILLAR 3 INFORMATION
- YEAR ENDED DECEMBER 31, 2018 -

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I. Risk management objectives and policies

The Arkéa group is a banking and insurance group. It comprises Crédit Mutuel Arkéa, the Crédit Mutuel de Bretagne, Crédit Mutuel du Sud-Ouest and Crédit Mutuel Massif Central networks as well as approximately thirty specialized subsidiaries that cover all banking and financial business lines. These subsidiaries, created to expand the Arkéa group's product and service offering, reflect the group's desire to constantly improve its service to its customer shareholders and customers – individuals, local sole proprietorships and businesses – and to contribute to the development of the regions by helping local authorities and institutions finance their infrastructure.

In response to the challenges facing the banking profession today, the Arkéa group continues to promote a corporate culture that constantly adapts to changes in the environment in which the business underlying its corporate purpose operates. The initiatives undertaken over the past few years aim to support technological developments, the emergence of new players and changes in customer behavior.

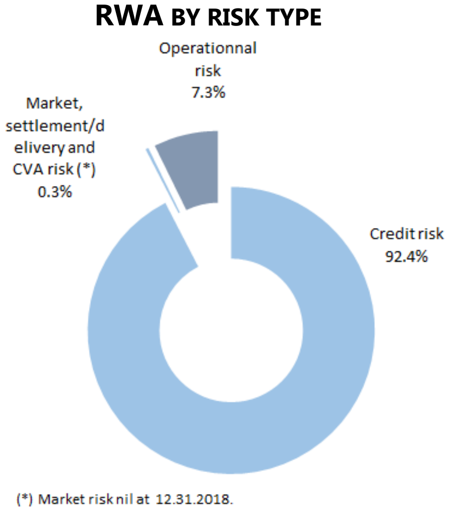
The level of capital accumulated over the years reflects the recurring nature of the income and earnings generated by the Arkéa group's development model. It illustrates the confidence generated and sustained by the group's development strategy combined with a diversified and moderate risk profile.

I.1. Risk profile

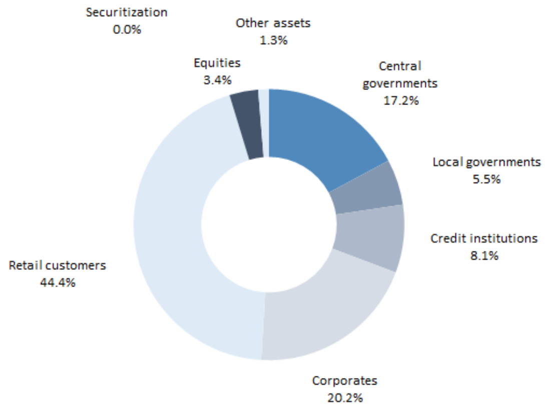
Retail banking and insurance constitute the Arkéa group's core business, as evidenced by the share of credit risk in the group's total capital requirements (92% at end-2018) and the predominance of the retail customer portfolio in this share.

(in € thousands)	12.31.2018	12.31.2017
Total capital	6,327,151	6,138,638
TIER 1 Capital	5,639,376	5,293,759
Common Equity Tier 1 capital	5,593,693	5,293,759
Net income, group share, transferred to reserves	397,788	388,529

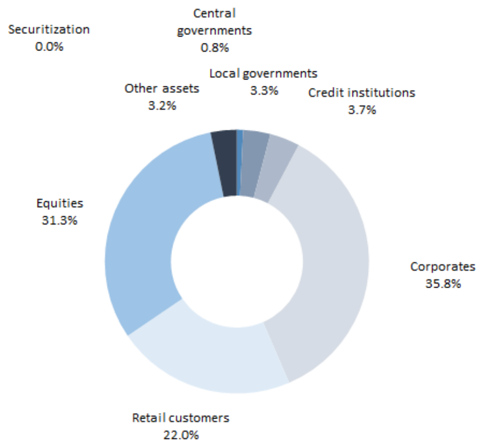
Leverage ratio : 6.7%
Overall solvency ratio : 19.8%
CET1 ratio : 17.5%
Financial conglomerate ratio : 154%
LCR : 130%



CREDIT RISK – EAD BY CATEGORY



CREDIT RISK – RWA BY CATEGORY



This risk profile reflects the management by the Arkéa group of its activity and the associated risk This management, which is under Crédit Mutuel Arkéa's control, is applied by each of the group's entities.

To sustain its results, the Arkéa group aims to achieve:

- high levels of security in terms of solvency and liquidity, which are closely monitored and instill trust in both customers (shareholders and non-shareholders) and investors contributing to the group's refinancing;
- sufficient resistance to stress scenarios resulting from adverse macroeconomic developments (liquidity drying up, substantial distortion of the yield curve, deterioration of the market values of exposed assets, deterioration of the ability of issuers of the debt instruments held and of borrower clients to make repayments) or difficulties limited to certain business sectors or key players.

Achievement of these objectives relies mainly on:

- the implementation of a credit risk policy leading to the long-term high quality of the loan portfolio, as regards both loans granted to customers and cash investments:
    - the loan portfolio comprises a very diversified customer base in which individuals represent the largest share alongside local sole proprietorships (artisans, small businesses, farmers, etc.), non-profit organizations, SMEs and large companies, as well as local authorities and institutions. The lending policy is based on an in-depth knowledge of the borrower, its business, the purpose for which the loan is to be used and the application of a tried and tested internal rating system, based mainly on statistical models approved by the supervisory authority. When deciding whether or not to lend, more importance is placed on the customer's ability to repay the loan than on the value of the collateral (this applies in particular to decisions concerning home loans).
    - cash investments also reflect a higher quality credit risk, with a significant preponderance of investment grade outstandings. These cash amounts are invested mainly in instruments issued by the French government or European financial counterparties, a large proportion of which are in the form of covered bonds.
- a prudent market risk policy, in the absence of a trading book, dedicated almost exclusively to investing cash surpluses, as transactions carried out on behalf of customers are systematically market-based.
- an equally prudent liquidity risk policy, with Crédit Mutuel Arkéa acting as the refinancing and reinvestment center for all the entities making up the group's banking scope.
- an interest rate risk policy under which Crédit Mutuel Arkéa acts as the central interest rate entity for all of the group's banking activities, including the refinancing center.
- an operational risk policy, the aim of which is to ensure that the Arkéa group's processes are, and remain, as reliable, secure and efficient as possible. It plays a part in increasing the satisfaction of

customer shareholders and customers and in ensuring the sound financial health of the Arkéa group by minimizing the cost of incidents and the equity required to cover them. It is implemented by means of:

  - operational risk mapping, based on a framework of processes covering all the Arkéa group's activities;
  - coordinating the operational risk management systems, including the Emergency and Business Continuity Plan (EBCP);
  - a self-assessment of the impacts in ordinary and exceptional circumstances supplemented by action plans intended to reduce the effects of their recurrence or to eliminate their causes, where this is possible and can be justified on economic grounds;
  - the implementation of an information systems security policy covering both the development and operation, whether internal or outsourced, of IT applications and data, as well as cyber security, both in a general manner and as an area of increasing importance, as it involves the security of online payments processed by the group's various entities, and therefore affects both online and network banking.

- a solvency policy designed to maintain the Arkéa group's financial strength over the long term. Relying on a prudential capital structure characterized by a high proportion of reserves, it results in the definition of a significant margin of safety compared to the regulatory capital requirements notified by the prudential supervisory authority, in the form of a floor level for the solvency ratio, under Pillar 2 of the regulations.
- a compliance policy that, through the proper application of the regulatory and legal provisions, protects the image and reputation of the Arkéa group and its executives.

I.2. Risk governance

Risk governance is based on the structure of the risk management function within the group and of the management body of the Arkéa group and of each of its entities.

The structure of the risk management function comprises various entities:

- the supervisory body: the Board of Directors of Crédit Mutuel Arkéa and the Risk and Internal Control Committee for the group and the Board of Directors or Supervisory Board for each subsidiary;
- the executive body: the Executive Committee and the Risk Monitoring Committee for the group and General Management/the Executive Board/the Management Committee as well as the Risk Monitoring Committee or its equivalent for each subsidiary;
- the manager of the risk management function: the Head of Risk Management for the Crédit Mutuel Arkéa parent company and the group, and the manager designated for each subsidiary;
- correspondents by risk type: the persons designated for each subsidiary.

Supervisory bodies

Each entity's supervisory body, i.e. its Board of Directors or Supervisory Board, is involved in risk management. It approves the risk appetite framework and its quantified indicators. In this way, it sets the risk management limits and objectives and monitors ongoing compliance with them via the regular updates it receives from the executive body.

The risk management limits and/or objectives set by Crédit Mutuel Arkéa's Board of Directors apply to the entire group. The management limits and/or objectives set by the supervisory bodies of the CCM networks and subsidiaries are therefore compatible and consistent with the thresholds adopted by Crédit Mutuel Arkéa's Board of Directors.

The Risk and Internal Control Committee, an offshoot of Crédit Mutuel Arkéa's Board of Directors, is responsible for assisting the Board in managing the risks associated with the Arkéa group's activities, in accordance with the November 3, 2014 administrative order. It is responsible for monitoring the effectiveness of the group's internal control (permanent and periodic) and risk management systems. Its role involves "*assessing in particular the consistency of the risk measurement, monitoring and management systems and proposing, as necessary, additional actions in that regard*[1]." The Risk and Internal Control Committee is presented with an overview of the group's risk situation drawn up at the end of each quarter and supplemented by a 12-month outlook. To this must be added the presentation of the annual review of the risk appetite framework and the system of limits, individually for each risk, as well as the statements required under the ICAAP and ILAAP regulations.

Executive bodies

Each entity's executive bodies are responsible for managing the risks associated with their activities. Thus the Group Executive Committee is responsible for the group's risk management, for which it is accountable to Crédit Mutuel Arkéa's Board of Directors.

As such, it draws up the group's risk appetite framework, which it then puts forward to the Board of Directors. It also approves the limits put forward to it by the Group Risk Monitoring Committee before presenting them to Crédit Mutuel Arkéa's Board of Directors for adoption. It is regularly informed of the group's risk situation by means of monthly management reports and a quarterly general review.

The effective managers of each group subsidiary have the same role and the same prerogatives at their level, it being understood that the risk management policy specific to each subsidiary is consistent with that of the group. This applies particularly to the system of limits and the group procedures applied by each entity.

Under the delegation of authority by the Group Executive Committee, the Risk Monitoring Committee and dedicated ad hoc committees (the Group ALM and Capital Management Committee and the IT Risk Governance Committee) are responsible for the overall monitoring of all risks associated with the group's activities, including all of the following:

- proposing the risk appetite framework and associated operational limits;
- approving the management policy for each Arkéa group risk;
- monitoring the results of the implementation of these policies and, in particular, controlling compliance with the limits, as well as the impacts on earnings and the regulatory ratios both in actual and forecast situations;
- reviewing any measure necessary or useful for managing these risks.

These provisions also apply to the body that acts as the risk monitoring committee for each entity. Depending on its size, each entity has a risk monitoring committee or a committee covering both the areas of "permanent control" and "risk" when the effective managers do not have direct responsibility for this role.

Under this structure, ultimate responsibility for an entity's risks, whether or not its activities are outsourced, lies with said entity and, in particular, its effective managers. The latter must report on the entity's risk situation to their supervisory body on a regular basis.

Risk management function

The head of the group's risk management function is appointed by Crédit Mutuel Arkéa's Board of Directors on the recommendation of the Chief Executive Officer. This responsibility was entrusted to Crédit Mutuel Arkéa's Head of Risk Management.

Each group entity also appoints its head of the risk management function in accordance with the same procedure: proposal by the effective managers, after obtaining the opinion of Crédit Mutuel Arkéa's Head of Risk Management, and approval by the supervisory body.

These risk management function heads are supported by a network of correspondents dedicated to monitoring each risk in each entity. For each type of risk identified within the group, an advisor for the entire group is appointed within the Crédit Mutuel Arkéa Risk Department. The adviser has as correspondents those persons appointed in all structures exposed to the same risk. These correspondents are advisors to the risk

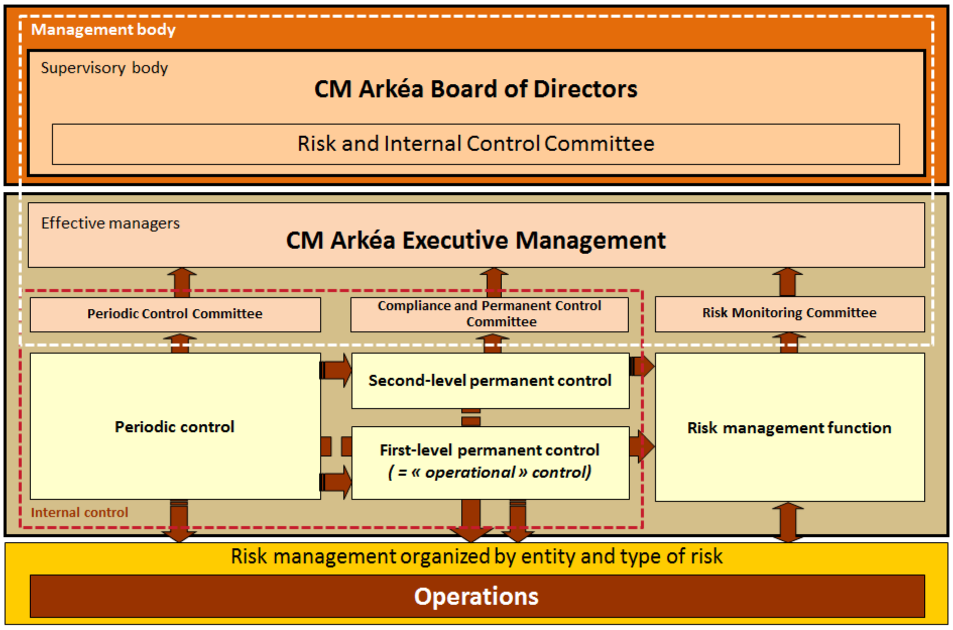
[1] *Extract from the Risk and Internal Control Committee's Operating Charter*

management function within their entity, as regards those risks about which they have the relevant expertise. They are in charge of managing and controlling the risks for which they are responsible, jointly with the employee appointed as head of the risk management function.

Internal control

Internal control, which encompasses permanent control and periodic control, is involved in risk governance. To that end, Crédit Mutuel Arkéa has, on the one hand, a permanent control function present in each entity and coordinated by Crédit Mutuel Arkéa's Compliance and Permanent Control department and, on the other hand, a single Internal Audit and Periodic Control department, operating directly in all group entities.
Each of these functions reports to the executive bodies, which are the Compliance and Permanent Control Committee and the Periodic Control Committee, and to the supervisory body via the Risk and Internal Control Committee or directly to Crédit Mutuel Arkéa's Board of Directors.

The Arkéa group's risk governance system benefits from a structure characterized by the effective complementarity of the risk management function, periodic control and permanent control, as shown in the diagram below:

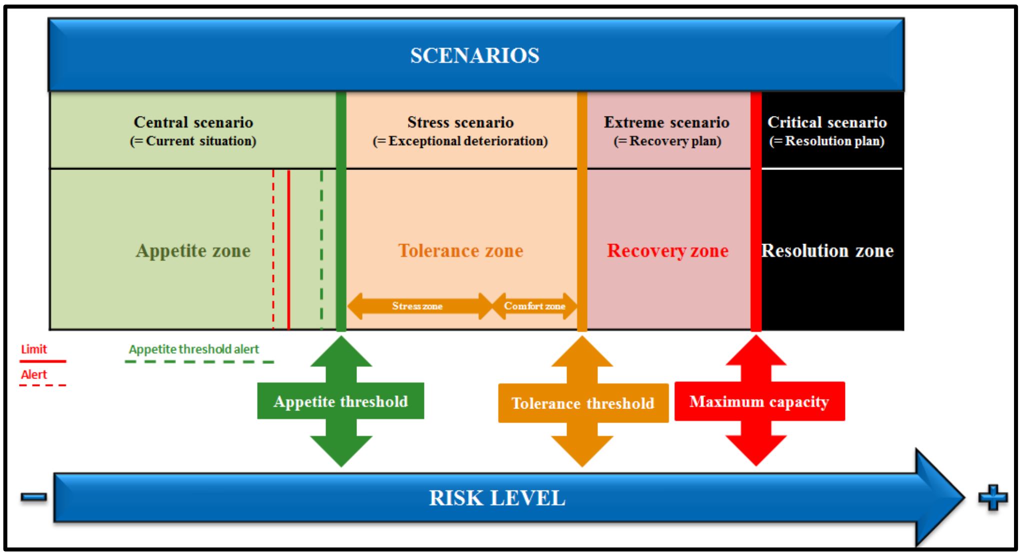


I.3. Risk appetite

The Arkéa group, a cooperative and mutualist group, maintains a long-term development model that is modern, profitable and generally prudent. The level of capital accumulated over the years reflects the recurring nature of the income and earnings generated. It illustrates the confidence generated, which is based on a development strategy combined with a moderate risk profile, inherent in an effective appetite framework implemented over the long term.

The priority given to reasonable profitability and risk reinforces the level of trust needed to maintain a lasting commercial relationship with customers. It especially characterizes the Arkéa group's cooperative and mutualist model, where members, who are joint owners, are also customers, and gives priority to the quality of a long-term relationship with their bank over the return offered by the share capital they hold. The return on share capital is considered as part of an overall assessment in the medium or long term, with no immediate urgency. The Arkéa group can thus manage or even anticipate changes in its environment, while continuing to effectively control its risks.

Risk appetite framework
Risk appetite is defined as the level of each type of risk that an organization can tolerate and is prepared to take, in both a normal and impaired economic and financial environment, as part of a development strategy over a forecast horizon of at least three years.



The aim of Crédit Mutuel Arkéa's risk appetite framework is to effectively govern and oversee risk management by implementing a consistent system:

- covering the various risk situations:
  - the current situation;
  - a stress situation related to an exceptional increase in the exposure to a given risk: stress tests are an integral part of the risk management system put in place by the group. They consist of simulating severe but plausible forward-looking scenarios (economic, financial, regulatory, etc.) in order to measure the bank's ability to withstand such situations;
  - the recovery situation as defined by the regulations.
- comprising a selection of key indicators, individually for each risk, for which reference values (alerts or limits) are set for each situation.

Governance of the risk appetite framework
The risk appetite framework is reviewed at least once a year, as part of the group's overall management process. The medium-term business and earnings forecast necessarily includes an assessment of future risk, under both normal and unfavorable conditions. This exercise aims to ensure a development trajectory with the greatest chances of success in achieving the target risk/return ratio.

The risk appetite framework is therefore one of the key components of the group's business management function. As such, its annual review is an opportunity to:

- decide on the level of risk borne by the group;
- measure the potential capacity for absorbing additional risk;
- project this level of risk according to assumptions concerning the development of the activities associated with the risk scenarios.

This iterative exercise has resulted in the adoption of the annual and medium-term plan, thereby ensuring the consistency of the commercial, financial and risk policies. Prepared jointly by Crédit Mutuel Arkéa's finance and risk departments, in collaboration with the management of the group's entities, it is presented to the Risk Monitoring Committee and then to Crédit Mutuel Arkéa's Executive Committee for approval, before being submitted to the Risk and Internal Control Committee and then to Crédit Mutuel Arkéa's Board of Directors for final adoption.
Its application is then monitored, the results of which are published in the quarterly risk management report and communicated to the group's management body.

II. Scope of the regulatory framework

Pursuant to the provisions of EU Regulation No. 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms (referred to as the "CRR"), the accounting and prudential scopes consist of the same entities. Only the consolidation method changes.
The consolidation method differs for entities in the insurance sector and non-financial entities (particularly securitization funds), which are consolidated using the equity method, regardless of the percentage of control.

Table 1 (LI3): Description of differences between the consolidation scopes (entity by entity)

Name of entity	Statutory consolidation method	Regulatory consolidation method			Sector / Activity
		Full consolidation	Proportional consolidation	Neither consolidated nor deducted	
Arkéa Banking Services	Full consolidation	X	-	-	Banking / Banking services
Arkéa Banque Entreprises et Institutionnels	Full consolidation	X	-	-	Banking / Corporate banking
Arkéa Bourse Retail	Full consolidation	X	-	-	Banking / Holding
Arkéa Capital (Gestion)	Full consolidation	X	-	-	Insurance and asset management / Asset management
Arkéa Capital Investissement	Full consolidation	X	-	-	Banking / Private equity
Arkéa Capital Managers Holding SLP	Full consolidation	X	-	-	Banking / Private equity
Arkéa Capital Partenaire	Full consolidation	X	-	-	Banking / Private equity
Arkéa Crédit Bail	Full consolidation	X	-	-	Banking / Leasing and finance leasing
Arkéa Direct Bank (formerly Fortuneo SA)	Full consolidation	X	-	-	Banking / Financial and stock market intermediation
Arkéa Foncière	Full consolidation	X	-	-	Banking / Real estate
Arkéa Home Loans SFH	Full consolidation	X	-	-	Banking / Refinancing entity
Arkéa Public Sector SCF	Full consolidation	X	-	-	Banking / Refinancing entity
Arkéa SCD	Full consolidation	X	-	-	Banking / Services
Caisse Centrale du Crédit Mutuel	Equity method	-	-	X	Banking / Mutual banking
Caisse de Bretagne de CMA	Full consolidation	X	-	-	Banking / Mutual banking
CFCAL Banque	Full consolidation	X	-	-	Banking / Specialized networks banking
Crédit Mutuel Arkéa	Full consolidation	X	-	-	Banking / Mutual banking
FCT Collectivités	Full consolidation	-	-	X	Banking / Securitization fund
Fédéral Equipements	Full consolidation	X	-	-	Banking / Services
Federal Finance	Full consolidation	X	-	-	Insurance and asset management / Private banking and asset management
Fédéral Finance Gestion	Full consolidation	X	-	-	Insurance and asset management / Asset management
Fédéral Service	Full consolidation	X	-	-	Banking / Services
Financo	Full consolidation	X	-	-	Banking / Specialized networks banking
Finansemble	Equity method	-	-	X	Insurance and asset management / Asset management
GICM	Full consolidation	X	-	-	Banking / Services
Izimmo	Full consolidation	X	-	-	Banking / Real estate
Izimmo Holding	Full consolidation	X	-	-	Banking / Holding
JIVAI	Equity method	-	-	X	Insurance and asset management / Insurance brokerage
Keytrade Bank (branch of Arkéa Direct Bank)	Full consolidation	X	-	-	Banking / Financial and stock market intermediation
Keytrade Bank Luxembourg SA	Full consolidation	X	-	-	Banking / Financial and stock market intermediation
La Compagnie Française des Successions	Equity method	-	-	X	Insurance and asset management / Asset management
Leasecom	Full consolidation	X	-	-	Banking / Leasing and finance leasing
Leasecom Car	Full consolidation	X	-	-	Banking / Leasing and finance leasing
Leetchi SA	Full consolidation	X	-	-	Banking / Services
LINXO GROUP	Equity method	-	-	X	Banking / Services
Mangopay SA	Full consolidation	X	-	-	Banking / Services
Monext	Full consolidation	X	-	-	Banking / Services
New Port	Equity method	-	-	X	Banking / Holding
New Primonial Holding (Primonial Holding)	Equity method	-	-	X	Insurance and asset management / mutual funds
Nextalk	Full consolidation	X	-	-	Banking / Services
Nouvelle Vague	Full consolidation	X	-	-	Banking / Services
Novelia	Full consolidation	X	-	-	Insurance and asset management / Insurance brokerage
Procapital	Full consolidation	X	-	-	Banking / Financial and stock market intermediation
Pumpkin	Full consolidation	X	-	-	Banking / Services
Schelcher Prince Gestion	Full consolidation	X	-	-	Insurance and asset management / Asset management
SCI Interfédérale	Full consolidation	X	-	-	Banking / Real estate
SMSPG	Full consolidation	X	-	-	Insurance and asset management / Holding
SMSPG 2	Full consolidation	X	-	-	Insurance and asset management / Holding
Strateo (branch of Arkéa Direct Bank)	Full consolidation	X	-	-	Banking / Financial and stock market intermediation
Suravenir	Full consolidation	-	-	X	Insurance and asset management / Life insurance
Suravenir Assurances	Full consolidation	-	-	X	Insurance and asset management / Non-life insurance
Vivienne Investissement	Equity method	-	-	X	Insurance and asset management / Asset management
Yomoni	Equity method	-	-	X	Insurance and asset management / Asset management
Younited credit	Equity method	-	-	X	Banking / Services

Entities that are neither consolidated nor deducted are accounted for using the equity method and risk-weighted.

Table 2 (LI1): Differences between the accounting and regulatory consolidation scopes and allocation of financial statement lines to regulatory risk categories

	a	b	c	d	e	f	g
			Carrying amounts of items:				
(in € thousands)	Carrying amounts as per published financial statements	Carrying amounts in the regulatory consolidation scope	subject to the credit risk framework	subject to the counterparty credit risk framework	subject to the securitization provisions	subject to the market risk framework	not subject to capital requirements or subject to deduction from equity
Assets							
Cash, due from central banks	3,236,588	3,236,588	3,236,588				-
Financial assets at fair value through profit or loss	1,179,263	1,182,444	774,305	408,139			-
Derivatives used for hedging purposes	692,564	692,564		692,564			-
Financial assets at fair value through equity	11,323,695	11,430,409	11,323,680				106,729
Securities at amortized cost	163,949	163,949	163,949				
Loans and receivables - credit institutions, at amortized cost	8,986,833	8,984,988	7,500,749	1,484,239			-
Loans and receivables - customers, at amortized cost	55,574,536	56,291,281	55,372,523				918,758
Remeasurement adjustment on interest-rate risk hedged portfolios	299,115	299,115	-				299,115
Placement of insurance activities	50,190,292	-					
Current tax assets	224,673	221,402	221,402				-
Deferred tax assets	149,446	143,884	89,369				54,515
Accruals, prepayments and sundry assets	867,127	941,479	941,479				-
Non-current assets held for sale	444,230	444,230	333,578				110,652
Deferred profit-sharing	-	-					
Investments in associates	201,775	1,592,707	1,581,131				11,576
Investment property	154,236	154,236	154,236				-
Property, plant and equipment	257,761	238,672	238,672				-
Intangible assets	435,758	430,473					430,473
Goodwill	538,461	538,461					538,461
Total Assets	**134,920,302**	**86,986,882**	**81,931,660**	**2,584,942**	**-**	**-**	**2,470,280**
Liabilities							
Due to central banks	-	-					-
Financial liabilities at fair value through profit or loss	811,071	814,252		453,190			361,062
Derivatives used for hedging purposes	427,735	427,735		427,735			-
Debt securities	12,770,678	12,730,890					12,730,890
Due to banks	7,117,358	7,149,780		1,962,621			5,187,159
Liabilities to customers	54,555,163	55,014,297					55,014,297
Remeasurement adjustment on interest-rate risk hedged portfolios	63,361	63,364					63,364
Current tax liabilities	127,008	114,765					114,765
Deferred tax liabilities	133,565	80,584	14,004				66,580
Accruals, deferred income and sundry liabilities	2,063,634	1,960,664					1,960,664
Liabilities associated with non-current assets held for sale	19,442	19,442					19,442
Insurance companies' technical reserves	48,033,048	- 0				-	0
Provisions	423,551	237,724					237,724
Subordinated debt	1,667,088	1,667,088					1,667,088
Total equity	6,707,600	6,706,296					6,706,296
Shareholders' equity, group share	6,704,447	6,704,447					6,704,447
Share capital and additional paid-in capital	2,266,390	2,266,390					2,266,390
Consolidated reserves	3,896,397	3,896,397					3,896,397
Gains and losses recognized directly in equity	104,372	104,372					104,372
Net income for the year	437,288	437,288					437,288
Non-controlling interests	3,152	1,849					1,849
Total Liabilities and Shareholders' Equity	**134,920,302**	**86,986,882**	**14,004**	**2,843,546**	**-**	**-**	**84,129,332**

The differences between columns a and b result solely from differences in methods between the statutory and regulatory scopes (see Table 1).

Table 3 (LI2): Main sources of differences between the regulatory amounts of the exposures and the carrying amounts in the financial statements

	(in € thousands)	Total	Items subject to: credit risk framework	counterparty credit risk framework	securitization provisions	market risk framework
1	**Carrying amount of assets in the regulatory consolidation scope (as per table LI1)**	**84,516,602**	**81,931,660**	**2,584,942**	**-**	**-**
2	**Carrying amount of liabilities in the regulatory consolidation scope (as per table LI1)**	**2,857,550**	**14,004**	**2,843,546**	**-**	**-**
3	**Total net assets in the regulatory consolidation scope**	**81,659,052**	**81,917,656**	**-258,604**	**-**	**-**
4	**Off-balance sheet commitments**	**13,743,036**	**13,743,036**		**-**	
	Measurement adjustment on off-balance sheet commitments	**-6,987,787**	**-6,987,787**		**-**	
5	*Measurement adjustments*	577,860		577,860		
6	*Adjustments resulting from different netting rules, other than those already recorded in line 2*	591,514		591,514		-
7	*Adjustments resulting from the recognition of provisions*	886,278	886,278		-	
8	*Adjustments resulting from prudential filters*	-	-			
9	*Other*	-261,574	-261,574		-	
10	**Regulatory value of exposures**	**90,208,378**	**89,297,608**	**910,771**		**-**

III. Capital

III.1. Composition of the capital

Since January 1, 2014, regulatory capital has been determined in accordance with Section II of EU Regulation No. 575/2013 of the European Parliament and of the Council of June 26, 2013 on prudential requirements for credit institutions and investment firms (referred to as the "CRR"), supplemented by technical standards (delegated regulations and EU implementing regulations of the European Commission).

Capital is the sum of:

- Tier 1 capital, comprising Common Equity Tier 1 (CET1) capital net of deductions and Additional Tier 1 (AT1) capital net of deductions;
- Tier 2 capital (T2) net of deductions.

As the European regulations allow credit institutions a transitional period to achieve compliance with these requirements, transitional provisions apply to certain components of equity.

Tier 1 capital

Common Equity Tier 1 capital consists of equity instruments and associated share premiums, reserves (including those relating to accumulated other comprehensive income) and retained earnings. Total flexibility of the payments is required and the instruments must be perpetual.

Additional Tier 1 capital consists of perpetual debt instruments with no incentive or obligation to redeem (in particular step-ups in interest rates).

Capital is determined on the basis of the group's book capital, calculated on the prudential scope, after applying "prudential filters" and a certain number of regulatory adjustments (see table below providing a reconciliation of book capital and regulatory capital).

Prudential filters:

As of January 1, 2018 and due to the ending of the transitional provisions applied to unrealized gains, these are now fully incorporated into common equity with the exception of unrealized gains and losses on cash flow hedges and issuer spread that are subject to a prudential filter.

The other prudential filters related to value adjustments due to requirements for conservative valuation (Additional Valuation Adjustments - AVA) and gains or losses at fair value resulting from own credit risk on derivative instrument liabilities (Debit Valuation Adjustments - DVA) continue to apply in accordance with the provisions of the CRR.

Differences relating to use of the equity method:

Differences relating to the equity accounting of associates are split between reserves and retained earnings, on the one hand, and the interim net income, on the other, according to the capital categories in which they originate.

Other regulatory adjustments:

The other adjustments to CET1 mainly involve:

- anticipation of dividend payments set in advance following a formal proposal or decision by the management body;
- the deduction of goodwill and other intangible assets net of deferred tax;

- the negative difference between provisions and expected losses as well as expected losses on equities;
- deferred tax assets that rely on future profitability and do not arise from temporary differences net of related tax liabilities;
- the deduction of direct and indirect holdings and holdings in the CET1 instruments of financial sector entities when they exceed a threshold of 10% of CET1.

Tier 2 capital

Tier 2 capital consists of subordinated debt instruments with a minimum maturity of 5 years. Incentives for early redemption are prohibited.

The amount of “eligible capital” is more limited. This concept is used to calculate thresholds for major risks and non-financial investments weighted at 1,250%. This is the sum of:

- Tier 1 capital; and
- Tier 2 capital, capped at 1/3 of Tier 1 capital.

Table 4: Reconciliation of book capital/prudential capital

(in € thousands)	Accounting consolidation	Prudential consolidation	Difference
Shareholders' equity	**6,707,612**	**6,706,308**	
Shareholders' equity, group share - excl. OCI	**6,600,074**	**6,600,074**	
Subscribed capital and share premiums	2,266,390	2,266,390	-
Consolidated reserves - group	3,896,396	3,896,396	-
Consolidated net income - group	437,288	437,288	-
Shareholders' equity - non-controlling interests - excl. OCI	**3,165**	**1,861**	
Consolidated reserves - Non-controlling interests	2,921	1,655	**1,266**
Consolidated net income - Non-controlling interests	244	206	**38**
Unrealized gains or losses - group share	**104,373**	**104,373**	-
of which equity instruments	54,272	54,272	-
of which debt instruments	138,685	138,685	-
of which cash flow hedges	- 2,399	- 2,399	-
Unrealized gains or losses - non-controlling interests	**- 12**	**- 12**	-
Other balance sheet items			
Intangible assets (a)	435,758	430,473	5,285
Goodwill (including goodwill included in the value of investments in associates)	548,519	548,519	-
Deferred tax			
. Assets	149,446	143,884	5,562
of which deferred tax assets on tax loss carryforwards	*8,400*	*8,400*	-
. Liabilities	133,565	80,584	52,981
of which deferred tax liabilities on intangible assets (b)	*30,246*	*30,246*	-
Subordinated debt	1,667,642	1,667,088	554

	(in € thousands)	CET1	AT1	T2
	Equity	**5,593,693**	**45,683**	**687,776**
1	**Equity, group share**	**6,676,386**		
	Paid-in capital and share premiums*	2,256,083		
	Prior retained earnings	4,022,516		
	Profit or loss (group share)	437,288		
	(-) Non-qualifying share of interim or year-end profits	- 39,500		
2	**Equity - Non-controlling interests**	**220**	**1**	**1**
	Qualifying non-controlling interests*	220	1	1
3	**Unrealized gains or losses - group share**	**- 21,755**		**-**
	of which equity instruments*	45,384		-
	of which debt instruments *	22,740		
	of which cash flow hedge reserve	- 2,399		
	Other balance sheet items included in the capital calculation	**-1,056,226**	**45,682**	**687,775**
4	(-) Gross amount of other intangible assets including deferred tax liabilities on intangible assets (a-b)	- 373,015		
	(-) Goodwill on intangible assets	- 581,242		
5	(-) Deferred tax assets depending on future earnings and not resulting from temporary differences net of the associated tax liabilities	- 6,071		
6	Subordinated debt*		45,682	1,545,311
	Deductions and prudential filters *(details on next page)*	- 95,898	-	- 857,536

Asterisks (*) indicate the existence of transitional provisions

Differences with the prudential balance sheet numbered above can be explained as follows:

1. The difference reflects the treatment required by the SGACPR's notice on gains and losses recorded by associates (see point 3) and the inclusion of estimated dividend payments
2. Specific calculation is made for non-controlling interests under the CRR
3. The difference reflects the treatment required by the SGACPR's notice on gains and losses recorded by associates (see point 1)
4. The amount of intangible assets deducted from capital includes the associated deferred tax liabilities
5. Deferred tax assets and liabilities are subject to specific treatment under the European regulations
6. Subordinated debt included in capital differs from the accounting consolidation due to items considered non-qualifying by the CRR, and to the calculation of a regulatory reduction over the last 5 years for fixed-term debt.

(in € thousands)	CET1	AT1	T2	
Details of deductions and prudential filters	**- 95,898**	**-**	**- 857,536**	
(-) Securitization positions that may be weighted at 1,250%	-			
(-) Instruments of relevant entities where the institution does not have a significant investment*	-	-	-	
(-) Instruments of relevant entities where the institution has a significant investment*	-	-	- 941,714	
Excess deductions in relation to the equity level	-	-	-	
Under the internal ratings-based approach, negative difference between provisions and expected losses	- 51,142			
Under the internal ratings-based approach, positive difference between provisions and expected losses			84,179	
Credit risk adjustments (standardized approach)			-	
Prudential filter: Cash flow hedge reserve	2,399			
Prudential filter: Value adjustments due to requirements for prudent valuation	- 40,790			
Prudential filter: Fair value gains and losses arising from own credit risk related to derivative liabilities	- 6,364			
Other	-		-	(1)

(1): CET1 => UCIs (+ transitional clauses) and T2: GP clauses on subsidies to leasing companies

Table 5: Qualitative information on capital instruments

Main features of CET1 capital instruments

		A SHARES	NEW B SHARES	FORMER B SHARES and C SHARES
1	**Issuer**	**CREDIT MUTUEL ARKEA (Crédit Mutuel de Bretagne, Crédit Mutuel du Sud-Ouest, Crédit Mutuel Massif Central)**	**CREDIT MUTUEL ARKEA (Crédit Mutuel de Bretagne, Crédit Mutuel du Sud-Ouest, Crédit Mutuel Massif Central)**	**CREDIT MUTUEL ARKEA (Crédit Mutuel de Bretagne, Crédit Mutuel du Sud-Ouest, Crédit Mutuel Massif Central)**
2	**Unique identifier** (e.g. CUSIP, ISIN or Bloomberg for private placement)	**96950041VJ1QP0B69503**	**96950041VJ1QP0B69503**	**96950041VJ1QP0B69503**
3	**Governing law of the instrument**	**Law no. 47-1775 of September 10, 1947 on the constitution of cooperatives and Article L. 512-1 of the French Monetary and Financial Code**	**Law no. 47-1775 of September 10, 1947 on the constitution of cooperatives and Article L. 512-1 of the French Monetary and Financial Code**	**Law no. 47-1775 of September 10, 1947 on the constitution of cooperatives and Article L. 512-1 of the French Monetary and Financial Code**
	Regulatory treatment			
4	Transitional CRR rules	**Common Equity Tier 1 capital**	**Common Equity Tier 1 capital**	**Common Equity Tier 1 capital**
5	Post-transitional CRR rules	**Common Equity Tier 1 capital**	**Common Equity Tier 1 capital**	**Ineligible**
6	Eligible at individual (sub-) consolidated/individual and (sub-) consolidated level	**Individual and (sub-) consolidated**	**Individual and (sub-) consolidated**	**Individual and (sub-) consolidated**
7	Instrument type (to be specified for each jurisdiction)	**Shares - list published by the EBA (Article 26, paragraph 3 of the CRR)**	**Shares - list published by the EBA (Article 26, paragraph 3 of the CRR)**	**Shares - list published by the EBA (Article 26, paragraph 3 of the CRR)**
8	**Amount recognized in regulatory capital (in €K, at 12.31.2018)**	**27,861 K€**	**2,171,942 K€**	**50,841 K€**
9	**Par value of instrument**	**Crédit Mutuel de Bretagne: €1 Crédit Mutuel du Sud-Ouest: €1 Crédit Mutuel Massif Central: €7**	**1 €**	**1 €**
9a	**Issue price**	**Crédit Mutuel de Bretagne: €1 Crédit Mutuel du Sud-Ouest: €1 Crédit Mutuel Massif Central: €7**	**1 €**	**1 €**
9b	**Redemption price**	**Crédit Mutuel de Bretagne: €1 Crédit Mutuel du Sud-Ouest: €1 Crédit Mutuel Massif Central: €7**	**1 €**	**1 €**
10	**Accounting classification**	**Shareholders' equity**	**Shareholders' equity**	**Shareholders' equity**
11	**Original date of issuance**	**Variable**	**Variable**	**Variable**
12	**Perpetual or dated**	**Perpetual**	**Perpetual**	**Perpetual**
13	Original maturity date	**N/A**	**N/A**	**N/A**
14	**Issuer call subject to prior approval by the supervisory authority**	**No**	**No**	**No**
15	Optional call date, contingent call dates and redemption amount	**N/A**	**N/A**	**N/A**
16	Subsequent call dates, if applicable	**N/A**	**N/A**	**N/A**
	Coupons/dividends			
17	**Fixed or floating dividend/coupon (or N/A)**	**N/A**	**N/A**	**N/A**
18	**Coupon rate and any related index**	**N/A**	**N/A**	**N/A**
19	**Existence of a dividend stopper**	**No**	**No**	**No**
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	**Fully discretionary**	**Fully discretionary**	**Fully discretionary**
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	**Fully discretionary**	**Fully discretionary**	**Fully discretionary**
21	Existence of step-up or other incentive to redeem	**No**	**No**	**No**
22	Cumulative or non-cumulative	**No**	**No**	**No**
23	**Convertible or non-convertible**	**Non-convertible**	**Non-convertible**	**Non-convertible**
24	If convertible, conversion trigger	**N/A**	**N/A**	**N/A**
25	If convertible, fully or partially	**N/A**	**N/A**	**N/A**
26	If convertible, conversion rate	**N/A**	**N/A**	**N/A**
27	If convertible, mandatory or optional conversion	**N/A**	**N/A**	**N/A**
28	If convertible, instrument type convertible into	**N/A**	**N/A**	**N/A**
29	If convertible, issuer of instrument it converts into	**N/A**	**N/A**	**N/A**
30	**Write-down features**	**Yes**	**Yes**	**Yes**
31	If write-down, write-down trigger	**By decision of the general shareholders' meeting or, in case of resolution, by decision of the Resolution College of the French Prudential Control and Resolution Authority (*Autorité de contrôle prudentiel et de résolution* - ACPR) pursuant to its powers under Article L. 613-31-16 of the French Monetary and Financial Code**	**By decision of the general shareholders' meeting or, in case of resolution, by decision of the Resolution College of the French Prudential Control and Resolution Authority (*Autorité de contrôle prudentiel et de résolution* - ACPR) pursuant to its powers under Article L. 613-31-16 of the French Monetary and Financial Code**	**By decision of the general shareholders' meeting or, in case of resolution, by decision of the Resolution College of the French Prudential Control and Resolution Authority (*Autorité de contrôle prudentiel et de résolution* - ACPR) pursuant to its powers under Article L. 613-31-16 of the French Monetary and Financial Code**
32	If write-down, full or partial	**Full or partial write-down**	**Full or partial write-down**	**Full or partial write-down**
33	If write-down, permanent or temporary	**Permanent**	**Permanent**	**Permanent**
34	If temporary write-down, description of write-up mechanism	**N/A**	**N/A**	**N/A**
35	**Position in subordination hierarchy in case of liquidation (specify instrument type immediately senior to instrument)**	**Ranking lower than all other claims**	**Ranking lower than all other claims**	**Ranking lower than all other claims**
36	**Non-compliant features (yes/no)**	**No**	**No**	**Yes**
37	**If yes, specify non-compliant features**	**N/A**	**N/A**	**With preference dividend**

Main features of AT1 capital instruments: N/A as of December 31, 2018

Main features of T2 capital instruments

		Super Subordinated Note	*Subordinated term notes*	*Subordinated term notes*	*Subordinated term notes*
1	**Issuer**	**CREDIT MUTUEL ARKEA**	**CREDIT MUTUEL ARKEA**	**CREDIT MUTUEL ARKEA**	**CREDIT MUTUEL ARKEA**
2	**Unique identifier** (e.g. CUSIP, ISIN or Bloomberg for private placement)	**FR0010096826**	**FR0013173028**	**FR0013236544**	**FR0013291556**
3	**Governing law of the instrument**	**French law**	**French law**	**French law**	**French law**
	Regulatory treatment				
4	Transitional CRR rules	**AT1 capital for 50% T2 capital for 50%**	**Tier 2 capital**	**Tier 2 capital**	**Tier 2 capital**
5	Post-transitional CRR rules	**Tier 2 capital**	**Tier 2 capital**	**Tier 2 capital**	**Tier 2 capital**
6	Eligible at individual (sub-) consolidated/individual and (sub-) consolidated level	**Individual and (sub-) consolidated**	**Individual and (sub-) consolidated**	**Individual and (sub-) consolidated**	**Individual and (sub-) consolidated**
7	Instrument type (to be specified for each jurisdiction)	**Bonds**	**EMTN Program**	**EMTN Program**	**EMTN Program**
8	**Amount recognized in regulatory capital (in €K, at 12.31.2018)**	**96,077 K€**	**498,576 K€**	**496,861 K€**	**496,786 K€**
9	**Par value of instrument**	**1,000 €**	**100,000 €**	**100,000 €**	**100,000 €**
9a	**Issue price**	**1,000 €**	**99,966 €**	**99,605 €**	**99,637 €**
9b	**Redemption price**	**N/A**	**N/A**	**N/A**	**N/A**
10	**Accounting classification**	**Shareholders' equity**	**Shareholders' equity**	**Shareholders' equity**	**Shareholders' equity**
11	**Original date of issuance**	**07.05.2004**	**06.01.2016**	**02.09.2017**	**10.25.2017**
12	**Perpetual or dated**	**Perpetual**	**Dated**	**Dated**	**Dated**
13	Original maturity date	**Undated perpetual bonds**	**06.01.2026**	**02.09.2029**	**10.25.2029**
14	**Issuer call subject to prior approval by the supervisory authority**	**Yes**	**N/A**	**N/A**	**N/A**
15	Optional call date, contingent call dates and redemption amount	**07.05.2014**	**N/A**	**N/A**	**N/A**
16	Subsequent call dates, if applicable	**N/A**	**N/A**	**N/A**	**N/A**
	Coupons/dividends				
17	**Fixed or floating dividend/coupon**	**Fixed to floating**	**Fixed**	**Fixed**	**Fixed**
18	**Coupon rate and any related index**	**6% half yearly from 07.05.2004 to 07.05.2005, then variable half-year rate until the redemption date of the security: CMS 10**	**3.25% p.a.**	**3.50% p.a.**	**1.875% p.a.**
19	**Existence of a dividend stopper**	**No**	**N/A**	**N/A**	**N/A**
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	**N/A**	**N/A**	**N/A**	**N/A**
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	**N/A**	**N/A**	**N/A**	**N/A**
21	Existence of step-up or other incentive to redeem	**N/A**	**N/A**	**N/A**	**N/A**
22	Cumulative or non-cumulative	**N/A**	**N/A**	**N/A**	**N/A**
23	**Convertible or non-convertible**	**Non-convertible**	**Non-convertible**	**Non-convertible**	**Non-convertible**
24	If convertible, conversion trigger	**N/A**	**N/A**	**N/A**	**N/A**
25	If convertible, fully or partially	**N/A**	**N/A**	**N/A**	**N/A**
26	If convertible, conversion rate	**N/A**	**N/A**	**N/A**	**N/A**
27	If convertible, mandatory or optional conversion	**N/A**	**N/A**	**N/A**	**N/A**
28	If convertible, instrument type convertible into	**N/A**	**N/A**	**N/A**	**N/A**
29	If convertible, issuer of instrument it converts into	**N/A**	**N/A**	**N/A**	**N/A**
30	**Write-down features**	**No**	**No**	**No**	**No**
31	If write-down, write-down trigger	**N/A**	**N/A**	**N/A**	**N/A**
32	If write-down, full or partial	**N/A**	**N/A**	**N/A**	**N/A**
33	If write-down, permanent or temporary	**N/A**	**N/A**	**N/A**	**N/A**
34	If temporary write-down, description of write-up mechanism	**N/A**	**N/A**	**N/A**	**N/A**
35	**Position in subordination hierarchy in case of liquidation (specify instrument type immediately senior to instrument)**	**N/A**	**N/A**	**N/A**	**N/A**
36	**Non-compliant features**	**No**	**No**	**No**	**No**
37	**If yes, specify non-compliant features**	**N/A**	**N/A**	**N/A**	**N/A**

(1) Enter N/A if not applicable

Main features of T2 capital instruments (contd)

		Participating loan	Participating loan	Participating loan
1	**Issuer**	**FINANCO**	**FINANCO**	**FINANCO**
2	**Unique identifier** (e.g. CUSIP, ISIN or Bloomberg for private placement)	**96950014VIDAWX1KHR21**	**96950014VIDAWX1KHR21**	**96950014VIDAWX1KHR21**
3	**Governing law of the instrument**	**French law**	**French law**	**French law**
	Regulatory treatment			
4	Transitional CRR rules	**Tier 2 capital**	**Tier 2 capital**	**Tier 2 capital**
5	Post-transitional CRR rules	**Tier 2 capital**	**Tier 2 capital**	**Tier 2 capital**
6	Eligible at individual (sub-) consolidated/individual and (sub-) consolidated level	**Individual and (sub-) consolidated**	**Individual and (sub-) consolidated**	**Individual and (sub-) consolidated**
7	Instrument type (to be specified for each jurisdiction)	**Participating loans**	**Participating loans**	**Participating loans**
8	**Amount recognized in regulatory capital (in €K, at 12.31.2018)**	**612 K€**	**1,581 K€**	**500 K€**
9	**Par value of instrument**	**N/A**	**N/A**	**N/A**
9a	**Issue price**	**N/A**	**N/A**	**N/A**
9b	**Redemption price**	**N/A**	**N/A**	**N/A**
10	**Accounting classification**	**Shareholders' equity**	**Shareholders' equity**	**Shareholders' equity**
11	**Original date of issuance**	**12.31.1997**	**12.20.2002**	**12.30.2004**
12	**Perpetual or dated**	**Perpetual**	**Perpetual**	**Perpetual**
13	Original maturity date	**N/A**	**N/A**	**N/A**
14	**Issuer call subject to prior approval by the supervisory authority**	**N/A**	**N/A**	**N/A**
15	Optional call date, contingent call dates and redemption amount	**N/A**	**N/A**	**N/A**
16	Subsequent call dates, if applicable	**N/A**	**N/A**	**N/A**
	Coupons/dividends			
17	**Fixed or floating dividend/coupon**	**Fixed**	**Fixed**	**Fixed**
18	**Coupon rate and any related index**	**E3M + 0.50%**	**E3M + 1%**	**E3M + 0.75%**
19	**Existence of a dividend stopper**	**N/A**	**N/A**	**N/A**
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	**N/A**	**N/A**	**N/A**
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	**N/A**	**N/A**	**N/A**
21	Existence of step-up or other incentive to redeem	**N/A**	**N/A**	**N/A**
22	Cumulative or non-cumulative	**N/A**	**N/A**	**N/A**
23	**Convertible or non-convertible**	**N/A**	**N/A**	**N/A**
24	If convertible, conversion trigger	**N/A**	**N/A**	**N/A**
25	If convertible, fully or partially	**N/A**	**N/A**	**N/A**
26	If convertible, conversion rate	**N/A**	**N/A**	**N/A**
27	If convertible, mandatory or optional conversion	**N/A**	**N/A**	**N/A**
28	If convertible, instrument type convertible into	**N/A**	**N/A**	**N/A**
29	If convertible, issuer of instrument it converts into	**N/A**	**N/A**	**N/A**
30	**Write-down features**	**No**	**No**	**No**
31	If write-down, write-down trigger	**N/A**	**N/A**	**N/A**
32	If write-down, full or partial	**N/A**	**N/A**	**N/A**
33	If write-down, permanent or temporary	**N/A**	**N/A**	**N/A**
34	If temporary write-down, description of write-up mechanism	**N/A**	**N/A**	**N/A**
35	**Position in subordination hierarchy in case of liquidation (specify instrument type immediately senior to instrument)**	**N/A**	**N/A**	**N/A**
36	**Non-compliant features**	**No**	**No**	**No**
37	**If yes, specify non-compliant features**	**N/A**	**N/A**	**N/A**

(1) Enter N/A if not applicable

Table 6: Quantitative information on capital instruments

		Amount at 12.31.2018	Amounts subject to pre-Regulation (EU) No. 575/2013 treatment or prescribed residual amount pursuant to Regulation (EU) No. 575/2013
	COMMON EQUITY TIER 1 (CET1) CAPITAL: instruments and reserves		
1	Capital instruments and the related share premium accounts	**2,205,242**	
	Of which: Shares	2,199,804	
	Of which: Share premiums	5,438	
2	Retained earnings	**4,022,516**	
3	Accumulated other comprehensive income (and other reserves)	**- 21,755**	
4	Amount of qualifying items referred to in Article 484 (3) and the related share premium accounts subject to phase-out from CET1	**50,841**	
5	Non-controlling interests eligible for CET1	**220**	0
5a	Independently audited interim profits net of any foreseeable expense or dividend	**397,788**	
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**6,654,851**	
	COMMON EQUITY TIER 1 (CET1) CAPITAL: regulatory adjustments		
7	Additional value adjustments (negative amount)	**- 40,790**	
8	Intangible assets (net of related tax liabilities) (negative amount)	**- 954,257**	
10	Deferred tax assets that rely on future profitability, excluding those arising from temporary differences, net of related tax liabilities (net of related tax liabilities when the conditions in Article 38 (3) are met) (negative amount)	**- 6,071**	-
11	Fair value reserves related to gains and losses on cash flow hedges	**2,399**	
12	Negative amounts resulting from the calculation of expected losses	**- 51,142**	
13	Any increase in equity resulting from securitized assets (negative amount)	**-**	
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	**- 11,297**	
15	Defined benefit pension fund assets (negative amount)	**-**	
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	**-**	-
20a	Exposure amount of the following items which qualify for a risk weight of 1.250%, where the institution opts for the deduction alternative	**-**	
20c	*of which: securitization positions (negative amount)*	-	
26	Regulatory adjustments applied to Common Equity Tier 1 capital in respect of amounts subject to pre-CRR treatment	**0**	
26a	Regulatory adjustments relating to unrealized gains and losses pursuant to Articles 467 and 468	**-**	
	of which: filter for unrealized gain on equity instruments	-	
	of which: filter for unrealized gain on debt instruments	-	
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1) capital**	**- 1,061,159**	
29	**Common Equity Tier 1 (CET1) capital**	**5,593,693**	
	ADDITIONAL TIER 1 (AT1) CAPITAL: instruments		
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase-out from AT1	**45,682**	
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including non-controlling interests not included in row 5) issued by subsidiaries and held by third parties	**1**	-
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**45,683**	
	ADDITIONAL TIER 1 (AT1) CAPITAL: regulatory adjustments		
41	Regulatory adjustments applied to Additional Tier 1 capital in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase-out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	
41a	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to Article 472 of Regulation (EU) No. 575/2013	-	
41b	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to Article 475 of Regulation (EU) No. 575/2013	-	
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**-**	
44	**Additional Tier 1 (AT1) capital**	**45,683**	
45	**Tier 1 capital (T1 = CET1 + AT1)**	**5,639,376**	

		Amount at 12.31.2018	Amounts subject to pre-Regulation (EU) No. 575/2013 treatment or prescribed residual amount pursuant to Regulation (EU) No. 575/2013
	TIER 2 (T2) CAPITAL: instruments and provisions		
46	Capital instruments and the related share premium accounts	1,545,311	
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase-out from T2	-	
48	Qualifying capital instruments included in consolidated T2 capital (including non-controlling interests and AT1 instruments not included in row 5) issued by subsidiaries and held by third parties	1	-
50	Adjustments for credit risk	84,179	
51	**Tier 2 (T2) capital before regulatory adjustments**	**1,629,490**	
	TIER 2 (T2) CAPITAL: instruments and provisions		
55	Direct holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	**- 941,714**	-
56	Regulatory adjustments applied to Tier 2 capital in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase-out as prescribed in Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)	-	
56a	Residual amounts deducted from Tier 2 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to Article 472 of Regulation (EU) No. 575/2013	-	
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tier 1 capital during the transitional period pursuant to Article 475 of Regulation (EU) No. 575/2013	-	
56c	Amount to be deducted from or added to Tier 2 capital with regard to additional filters and deductions required pre-CRR	-	
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**- 941,714**	
58	**Tier 2 (T2) capital**	**687,776**	
59	**Total capital (TC = T1 + T2)**	**6,327,151**	
59a	Risk-weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase-out as prescribed in Regulation (EU) No. 575/2013	-	
	of which items not deducted from CET1 (Regulation (EU) No. 575/2013, residual amounts) (items to be detailed line by line, for example, deferred tax assets that rely on future profitability net of related tax liabilities, indirect holding of own CET1, etc.)	-	
60	**Total risk-weighted assets**	**32,019,694**	

Amount at 12.31.2018

	CAPITAL RATIOS AND BUFFERS		
61	**Common Equity Tier 1 capital (as a percentage of total risk exposure amount)**		**17.47%**
62	**Tier 1 capital (as a percentage of total risk exposure amount)**		**17.61%**
63	**Total capital (as a percentage of total risk exposure amount)**		**19.76%**
64	**Institution-specific buffer requirement (CET1 requirement in accordance with Article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer, expressed as a percentage of risk exposure amount**		**1.879%**
65	***of which: capital conservation buffer requirement***		***1.875%***
66	***of which: countercyclical buffer requirement***		***0.004%***
67	***of which: systemic risk buffer requirement***		***0.000%***
67a	***of which: global systemically important institution (G-SII) or other systemically important institutions (O-SII) buffer***		**0.000%**
68	**Common Equity Tier 1 capital available to meet buffer requirements (as a percentage of risk exposure amount)**		**10.22%**
	AMOUNTS BELOW THRESHOLDS FOR DEDUCTION (BEFORE RISK WEIGHTING)		
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)		191,969
73	Direct and indirect holdings of the capital of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)		230,345
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liabilities when the conditions in Article 38 (3) are met)		88,666
	APPLICABLE CAPS ON THE INCLUSION OF PROVISIONS IN TIER 2 CAPITAL		
76	Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)		-
77	Cap on inclusion of credit risk adjustments in T2 under standardized approach		66,866
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)		65,254
79	Cap on inclusion of credit risk adjustments in T2 under internal ratings-based approach		84,179
	CAPITAL INSTRUMENTS SUBJECT TO PHASE-OUT ARRANGEMENTS (only applicable between January 1, 2014 and January 1, 2022)		
80	Current cap on CET1 instruments subject to phase-out arrangements		246,931
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)		-
82	Current cap on AT1 instruments subject to phase-out arrangements		45,682
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	50,394
84	Current cap on T2 instruments subject to phase-out arrangements		-
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)		-

III.2. Capital requirements

Table 7 (OV1): Overview of risk-weighted assets

	(in € thousands)	Risk weighted assets (RWA)		Minimum capital requirements
		12.31.2018	12.31.2017	12.31.2018
1	**Credit risk (excluding counterparty credit risk - CCR)**	**28,525,450**	**25,604,652**	**2,282,036**
2	of which standardized approach	5,891,738	5,184,300	471,339
3	of which foundation IRB (FIRB) approach	442,893	705,921	35,431
4	of which advanced IRB (AIRB) approach	13,656,580	11,988,712	1,092,526
5	of which equities under the IRB approach	8,534,238	7,725,719	682,739
6	**Counterparty credit risk**	**369,836**	**359,047**	**29,587**
7	of which market value	263,722	275,835	21,098
8	of which initial exposure	-	-	-
9	of which standardized approach applied to counterparty risk	-	-	-
10	of which internal model method	-	-	-
11	of which risk exposure amount for contributions to the default fund of a CCP	-	-	-
12	of which CVA	106,114	83,212	8,489
13	**Settlement risk**	**713**	**0**	**57**
14	**Securitization exposures in the banking book**	**-**	**40,563**	**-**
15	of which foundation IRB (FIRB) approach	-	40,276	-
16	of which supervisory formula method	-	-	-
17	of which internal assessment approach	-	-	-
18	of which standardized approach	-	287	-
19	**Market risk**	**-**	**-**	**-**
20	of which standardized approach	-	-	-
21	of which approaches based on the internal model method	-	-	-
22	**Major risks**	**-**	**-**	**-**
23	**Operational risk**	**2,324,408**	**1,938,964**	**185,953**
24	of which basic indicator approach	377,910	379,160	30,233
25	of which standardized approach	86,272	81,185	6,902
26	of which advanced measurement approach	1,860,226	1,478,619	148,818
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**799,287**	**642,409**	**63,943**
28	**Floor adjustment**	**-**	**-**	**-**
29	**Total**	**32,019,694**	**28,585,635**	**2,561,576**

IV. Prudential indicators

IV.1. Solvency ratios

The Arkéa group's solvency ratios (after the integration of income net of estimated dividend pay-out) were as follows:

Table 8: Solvency ratios

(in € thousands)	12.31.2018	12.31.2017
COMMON EQUITY TIER 1 (CET1) CAPITAL	**5,593,693**	**5,293,759**
Share capital	2,256,083	2,201,938
Eligible reserves	4,398,769	4,201,761
Deductions from core capital	- 1,061,159	- 1,109,941
ADDITIONAL TIER 1 (AT1) CAPITAL	**45,683**	**-**
TIER 2 (T2) CAPITAL	**687,776**	**844,879**
Subordinated notes and other items	1,545,311	1,574,767
Additional capital deductions	- 857,535	- 729,888
TOTAL CAPITAL FOR SOLVENCY RATIO CALCULATION	**6,327,151**	**6,138,638**
Risk-weighted assets in respect of credit risk	29,588,459	26,563,459
Risk-weighted assets in respect of settlement risk	713	-
Risk-weighted assets in respect of market risk and CVA	106,114	83,212
Risk-weighted assets in respect of operational risk	2,324,408	1,938,964
TOTAL RISK-WEIGHTED ASSETS	**32,019,694**	**28,585,635**
SOLVENCY RATIOS		
Common Equity T1 (CET1) ratio	**17.5%**	**18.5%**
Tier 1 ratio	17.6%	18.5%
Overall ratio	19.8%	21.5%

As is the case with other banks, Crédit Mutuel Arkéa has, since January 1, 2016, been required to comply progressively with additional capital requirements, as follows:

- a conservation buffer, which is mandatory for all banks: 1.875% as of December 31, 2018 with a target of 2.5% of risk weighted assets (2019);
- a specific countercyclical capital buffer for each entity ("capped" at 1.875% in 2018), which is not material for Crédit Mutuel Arkéa this year. The countercyclical buffer, which is designed to protect banks from excessive growth in credit (in particular a deviation from the ratio of credit to gross domestic product) is imposed at the discretion of the designated authority of each jurisdiction, applicable to all exposures that banks have in this jurisdiction. In France, the countercyclical buffer is set by the French financial stability authority (*Haut Conseil de Stabilité Financière* - HCSF). In principle, this rate ranges from 0% to 2.5% (or higher in certain circumstances). In 2018, the *Haut Conseil de Stabilité Financière* set this rate at 0% for France. The mandatory recognition of countercyclical capital buffer rates implemented in other states was capped at 1.875%. Beyond this cap, rates require the explicit recognition of the HCSF. In 2018, the HCSF recognized the rates of 2% for Norway and 2% for Sweden. The countercyclical buffer rate specific to the group is the weighted average of the countercyclical buffer rates that apply in the countries that correspond to the group's main credit exposures.

Table 9: Countercyclical capital buffer specific to the institution

Total risk-weighted assets (in €k)	32,019,694
Countercyclical buffer rate specific to the institution (as a %)	0.004%
Countercyclical buffer requirements applicable to the institution	1,397

Table 10: Geographical breakdown of relevant credit exposures for calculating the countercyclical capital buffer

Countries for which a capital buffer in excess of 0% has been recognized by the French financial stability authority (*Haut Conseil de Stabilité Financière* - HCSF)	**General credit exposures**		**Trading book exposures**		**Securitization exposures**		**Capital requirements**				**Share of capital adequacy requirements**	**Countercyclical capital buffer rate**
	Value exposed to risk for the standardized approach	Value exposed to risk for the IRBA	Sum of long and short positions in the trading book	Value of the trading book's exposures for the internal models	Value exposed to risk for the standardized approach	Value exposed to risk for the IRBA	Of which: general credit exposures	Of which: trading book exposures	Of which: securitization exposures	Total		
UK	20,861	743,199					6,910			6,910	0.316%	1.00%
NORWAY	9,457	184,704					720			720	0.033%	2.00%
SWEDEN	2,251	224,571					596			596	0.027%	2.00%
OTHER COUNTRIES (including France)	7,496,933	55,344,348					2,178,417			2,178,417	99.624%	0.00%
Total exposures and capital requirements	**7,529,502**	**56,496,822**					**2,186,643**			**2,186,643**		

IV.2. Supplementary supervision of financial conglomerates

Arkéa group is one of the financial conglomerates supervised by the ACPR's General Secretariat (SGACPR). It operates as a financial conglomerate via Suravenir and Suravenir Assurances. These subsidiaries market a wide range of life insurance, personal insurance and property and liability insurance products.

By way of derogation from Articles 36 and 43 of the CRR and in accordance with the provisions of Article 49 of that regulation, the SGACPR has authorized the Arkéa group not to deduct holdings in the capital instruments of insurance sector entities from its Common Equity Tier 1 capital and to adopt the so-called "weighted equity-accounted value" method, which consists in weighting instruments held in the group's insurance subsidiaries on the denominator of the solvency ratio.

Consequently, and pursuant to the November 3, 2014 administrative order, the Arkéa group is also subject to an additional capital adequacy requirement according to the so-called “accounting consolidation” procedures under IFRS.

Accordingly, in this context, insurance sector entities that are fully consolidated for accounting purposes are also fully consolidated for prudential purposes, for calculating the additional requirement.

The risk supervision measures relating to the conglomerate have been approved by Crédit Mutuel Arkéa’s Board of Directors, the Risk Monitoring Committee and the ALM and Capital Management Committee.

This supervision has three parts, in the conglomerate’s scope:

- the calculation of the supplementary capital adequacy requirement; as the conglomerate ratio is one of the key solvency indicators, special attention is paid to it:
    - an internal limit has been defined. It is also governed by tolerance and management thresholds,
    - a specific procedure has been established for any breaches of the limit set by the Board of Directors. This procedure involves General Management and the group’s Board of Directors.
- the control of the concentration of risks by beneficiary;
- the control of intra-group transactions together with a breakdown of those transactions in excess of a threshold.

The first part relating to the calculation of the supplementary capital adequacy requirement makes it possible to perform an annual check on coverage of solvency requirements relating to the banking sector and the insurance sector by the conglomerate's consolidated book capital, including regulatory adjustments and transitional provisions in the CRR regulation.

The minimum financial conglomerate ratio requirement is 100% and is calculated as follows:

$$\text{Financial conglomerate ratio} = \frac{\text{The conglomerate's total capital}}{\text{Banking requirements + Insurance requirements}}$$

As of December 31, 2018, the Arkéa group had a coverage ratio of its conglomerate's capital requirements of 154%, after the integration of income net of estimated dividends.

The second part, relating to control of the concentration of risks by beneficiary on a consolidated basis, makes it possible to report gross risks (aggregate exposure to a single beneficiary) in excess of 10% of the conglomerate’s consolidated shareholders’ equity or €300 million. A distinction is drawn between the banking and insurance sectors for each beneficiary.

The last part, relating to control of intra-group transactions, concerns a summary and a breakdown by type of transaction between the conglomerate's banking and insurance sectors for refinancing, off-balance sheet commitments and traded products.

Table 11: Non-deducted investments in insurance undertakings

(in € thousands)	Exposure	RWA
Holdings of own funds instruments of a financial sector entity where the institution has a significant investment not deducted from own funds	**1,387,632**	**5,134,237**

IV.3. Leverage ratio

The procedures for monitoring the risk of excessive leverage have been approved by Crédit Mutuel Arkéa's Board of Directors and the ALM and Capital Management Committee. They are designed around the following:

- the leverage ratio is one of the key solvency indicators and is therefore the focus of particular attention,
- an internal limit has been set. It is also governed by tolerance and management thresholds,
- a specific procedure has been established for any breaches of the limit set by the Board of Directors. This procedure involves General Management and the group's Board of Directors.

The leverage ratio, as a proportion of Tier 1 capital, increased slightly compared with 2017 (+0.3 points) and stood at 6.7% at the end of 2018.

In the numerator, Tier 1 capital increased by 6.5% (+€0.3 billion) to €5.6 billion. This increase was due mainly to the inclusion of the net income for the year (+€0.4 billion).
In the denominator, the amount of exposures increased by €1.6 billion (+1.9%) to €83.9 billion at December 31, 2018. This increase was due mainly to the growth in customer lending (+€6.4 billion) and in capital markets activities (+€0.9 billion), largely offset by the exemption for centralized CDC savings (-€5.7 billion).

Table 12 (LRSum): Reconciliation of the assets as per the financial statements and the exposures for the purposes of the leverage ratio

(in € thousands)			Exposures at 12.31.2018
1	**Consolidated assets as published in the financial statements**		134,920,302
2	**Adjustments on entities consolidated for accounting purposes**, but outside the regulatory scope	-	47,933,420
4	Adjustments on derivatives	-	270,070
5	Adjustments on securities financing transactions (SFTs)	-	61,219
6	Adjustments on off-balance sheet items (conversion of off-balance sheet items to credit equivalents)		5,736,098
EU-6a	(Adjustments on intra-group exposures excluded from the calculation of the leverage ratio, in accordance with Article 429.7 of the CRR)		-
EU-6b	(Adjustments on exposures excluded from the calculation of the leverage ratio, in accordance with Article 429.14 of the CRR) – CDC debt	-	5,726,493
7	Other adjustments	-	2,722,621
8	**Total leverage ratio exposure**		83,942,576

Table 13 (LRCom): Leverage ratio

	(in € thousands)	Exposures at 12.31.2018
	Balance sheet (excluding derivatives and securities financing transactions)	
1	**Balance sheet items** (excluding derivatives, securities financing transactions and fiduciary assets, but including collateral)	82,031,385
2	(**Assets deducted** to determine Tier 1)	- 51,142
3	**Total balance sheet exposures** (excluding derivatives, securities financing transactions and fiduciary assets) - sum of lines 1 and 2	**81,980,243**
	Derivatives	
4	**Replacement cost** associated with all derivatives (i.e. net of eligible margin calls received)	252,772
5	**Add-on** for potential future exposures associated with derivatives (market price valuation method)	577,860
7	(**Deductions of margin calls** in cash paid under derivatives transactions)	-
9	**Adjusted effective notional amount of written credit derivatives**	-
10	(**Adjusted effective notional offsets and add-on deductions for written credit derivatives**)	-
11	**Total derivatives exposures - sum of lines 4 to 10**	**830,633**
	Securities financing transaction exposures	
12	**Gross SFT assets** (with no recognition of netting), after adjusting for sale accounting transactions	1,122,096
14	**Counterparty credit risk exposure** for SFT assets	-
16	**Total securities financing transaction exposures - sum of lines 12 to 15a**	**1,122,096**
	Other off-balance sheet exposures	
17	**Off-balance sheet exposures** at gross notional amounts	13,742,986
18	(**Adjustments** to credit risk equivalent amounts)	- 8,006,887
19	**Other off-balance sheet exposures - sum of lines 17 to 18**	**5,736,098**
	Exempted exposures pursuant to Articles 429.7 and 429.14 of the CRR (on-balance sheet and off-balance sheet)	
EU-19a	(**Exemption of intra-group exposures** (individual basis) in accordance with Article 429.7 of the CRR (on-balance sheet and off-balance sheet))	-
EU-19b	(**Exemption of exposures** pursuant to Article 429.14 of the CRR (on-balance sheet and off-balance sheet))	- 5,726,493
	Equity and total exposure	
20	**Tier 1**	**5,639,376**
21	**Total exposures - sum of lines 3, 11, 16, 19, EU-19a and EU-19b**	**83,942,576**
	Leverage ratio	
22	**Leverage ratio**	**6.7%**
	Choice of transitional arrangements and amounts of derecognized fiduciary items	
EU-23	**Choice of transitional arrangements** for defining capital measurement	**YES**

Table 14 (LRSpl): Breakdown of balance sheet exposures

(in € thousands)		**Exposures at 12.31.2018**
EU-1	**Total balance sheet exposures*, of which:**	**76,304,892**
EU-2	**Trading book exposures**	-
EU-3	**Banking book exposures, of which:**	**76,304,892**
EU-4	Covered bonds	1,545,411
EU-5	Exposures treated as sovereign exposures	9,855,154
EU-6	Exposures on regional governments, multilateral development banks, international organizations and public-sector entities not treated as sovereign exposures	4,171,789
EU-7	Institutions	5,208,208
EU-8	Exposures secured by a mortgage on immovable property	23,682,985
EU-9	Retail exposures	15,200,273
EU-10	Corporate exposures	12,238,559
EU-11	Exposures in default	600,041
EU-12	Other exposures (equities, securitizations and other assets not related to credit exposures)	3,802,470

** excluding derivatives, securities financing transactions and exempted exposures*

V. Capital adequacy

Pillar 2 of the Basel Accords requires banks to carry out their own assessment of their economic capital and to use stress scenarios to assess their capital requirements in the event of an economic downturn. This pillar serves as a means of dialog between the bank and the Supervisor on the adequacy of the institution's capital.

Crédit Mutuel Arkéa therefore has a system for measuring and monitoring its risks, including in particular the assessment of internal capital in accordance with the Internal Capital Adequacy Assessment Process (ICAAP). This approach results in the signing of an annual ICAAP statement by the Chairman and Chief Executive Officer of Crédit Mutuel Arkéa.

The ICAAP approach is fully integrated into the risk governance framework. It includes the following stages, covering a forecast period of at least 3 years:

- the identification of the significant risks incurred by the bank and the associated procedures, in close collaboration with risk management;
- the assessment of the capacity of these risks to be absorbed on an ongoing basis through Pillar 1 regulatory capital requirements;
- the internal calculation of the level of economic capital to be allocated, to cover risks fully, in both normal and stress scenarios.

The surplus of the economic capital requirement relative to the regulatory capital requirements constitutes a safety margin for the bank's solvency, in line with the risk appetite framework. Its amount depends on the group's risk profile (in light of its current and future activities) and its degree of risk aversion.

The results of the ICAAP, which are regularly presented to the group's management bodies, demonstrate that it has an adequate level of capital to cover its risk exposure in line with its solvency appetite. The economic capital requirement is barely higher than the regulatory capital requirement, which is currently being increased by an additional regulatory capital requirement for large companies and bank counterparties. The level of security with respect to solvency, measured by the ratio of surplus capital to the regulatory capital requirement (see CET1 ratio) and to the economic capital requirement, therefore remains very high, given the Arkéa group's moderate risk profile and ample capital.

VI. Credit risk

Credit risk is one of the Arkéa group's main risks. The credit risk management policy is presented in the registration document, in the section entitled "Risk factors".

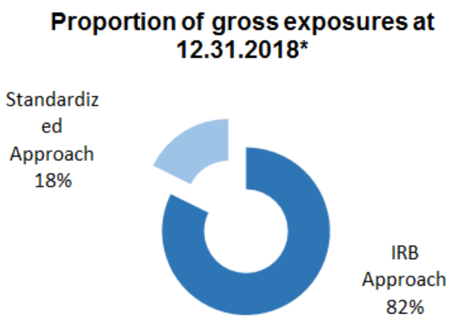
VI.1. Exposures

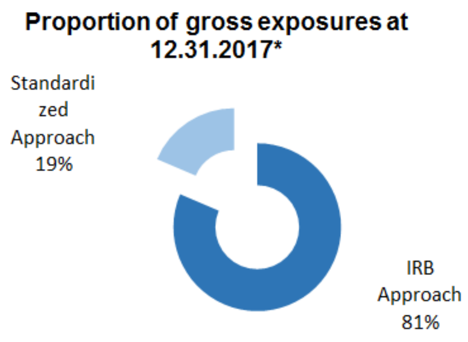
Crédit Mutuel Arkéa uses its internal ratings system to calculate its regulatory capital requirements in respect of credit risk, following the authorization issued by the ACPR:

- using the advanced method, as from June 30, 2008, for the retail customer portfolio;
- using the foundation method, as from December 31, 2008, then the advanced method, as from December 31, 2012, for the bank portfolio;
- using the advanced method, as from December 31, 2012, for the corporate portfolio.

In 2018, in connection with the TRIM (Targeted Review of Internal Models) exercise, the European Central Bank confirmed the authorization given to the group for the retail home loan portfolio.

The percentage of exposures authorized under the advanced method was more than 80% as of December 31, 2018. The foundation method was not used.





* Measurement on the Credit institutions, Corporate and Retail customer scope.

Table 15 (CRB-B): Total and average net amount of exposures

	(in € thousands)	**Net exposures at end of period**	**Average net exposures over the year**
1	Governments and central banks	-	-
2	Credit institutions	6,429,811	4,427,506
3	Corporates	19,897,609	17,736,742
4	*Of which: Specialized financing*	212,039	161,270
5	*Of which: SMEs*	7,044,183	6,900,594
6	Retail customers	35,179,909	33,973,164
7	*Exposures secured by a mortgage on immovable property*	19,732,837	18,803,091
8	*SMEs*	2,407,905	2,349,221
9	*Non-SMEs*	17,324,932	16,453,871
10	*Revolving*	267,080	264,745
11	*Other - retail customers*	15,179,991	14,905,328
12	*SMEs*	5,671,483	5,620,689
13	*Non-SMEs*	9,508,509	9,284,638
14	Equities	2,819,449	2,590,978
14a	Securitizations and other assets	509,065	690,681
15	**Total IRB approach**	**64,835,843**	**59,419,071**
16	Governments and central banks	7,666,992	8,005,804
17	Regional governments and local authorities	5,860,782	5,433,636
18	Public sector (public bodies excluding central governments)	7,636,519	7,720,123
19	Multilateral development banks	60,689	60,906
20	International organizations	256,288	257,226
21	Credit institutions	358,390	1,324,691
22	Corporates	697,103	2,537,711
23	*Of which: SMEs*	61,968	220,595
24	Retail customers	2,766,914	2,679,586
25	*Of which: SMEs*	243,835	232,416
26	Exposures secured by a mortgage on immovable property	3,184,574	2,836,332
27	*Of which: SMEs*	-	31,376
28	Exposures in default	220,892	244,371
29	Exposures presenting a particularly high risk	-	-
30	Covered bonds	28,774	397,195
31	Exposures to institutions and corporates with a short-term credit assessment	-	-
32	Exposures in the form of units or shares in undertakings for collective investment (UCIs)	1,268,812	1,382,927
33	Exposures to equities	13,586	12,747
34	Securitizations and other assets	643,643	435,450
35	**Total standardized approach**	**30,663,960**	**33,328,705**
36	**Total**	**95,499,803**	**92,747,777**

Exposures by geographic area

Crédit Mutuel Arkéa operates mainly in France. The geographical breakdown of gross exposures reflects this as 92.4% of its commitments are to French counterparties.

Table 16 (CRB-C): Geographical breakdown of exposures

(in € thousands)	Net exposures (in € thousands)													
	Europe	**France**	**Germany**	**Belgium**	**Spain**	**Luxembourg**	**Netherlands**	**UK**	**Other**	**Rest of the World**	**USA**	**Canada**	**Other**	**Total**
Governments and central banks	**-**	-	-	-	-	-	-	-	-	**-**	-	-	-	**-**
Credit institutions	**5,064,503**	2,939,588	116,821	10,522	58,685	-	393,388	798,469	747,030	**1,365,308**	174,039	960,004	231,265	**6,429,811**
Corporates	**19,887,887**	18,996,435	66,095	174,229	7,633	71,861	281,569	252,309	37,756	**9,723**	9,722	-	1	**19,897,609**
Retail customers	**35,179,635**	35,179,152	-	76	4	290	1	112	0	**274**	11	-	262	**35,179,909**
Equities	**2,811,018**	2,761,835	-	359	-	8,220	38,500	2,103	-	**8,431**	8,431	-	0	**2,819,449**
Other assets	**509,065**	509,065	-	-	-	-	-	-	-	**-**	-	-	-	**509,065**
Total IRB approach	**63,452,108**	60,386,076	182,916	185,185	66,322	80,372	713,458	1,052,993	784,786	**1,383,735**	192,203	960,004	231,528	**64,835,843**
Governments and central banks	**7,565,474**	5,529,247	-	93,730	566,408	-	90,249	-	1,285,840	**101,519**	91,589	9,930	0	**7,666,992**
Regional governments and local authorities	**5,860,782**	5,860,782	-	-	-	-	-	-	-	**-**	-	-	-	**5,860,782**
Public sector (public bodies excluding central governments)	**7,636,519**	7,438,924	24,503	-	-	-	173,092	-	-	**-**	-	-	-	**7,636,519**
Multilateral development banks	**53,566**	10,665	-	-	-	42,901	-	-	-	**7,123**	7,123	-	-	**60,689**
International organizations	**256,288**	-	-	-	-	256,288	-	-	-	**-**	-	-	-	**256,288**
Credit institutions	**312,518**	287,960	-	-	-	15,347	4,013	-	5,198	**45,872**	6,207	10,677	28,989	**358,390**
Corporates	**665,042**	614,884	22,770	4,511	-	-	16,919	3,707	2,251	**32,060**	16,737	-	15,323	**697,103**
Retail customers	**2,766,914**	2,766,914	-	-	-	-	-	0	-	**-**	-	-	-	**2,766,914**
Exposures secured by a mortgage on immovable property	**3,184,574**	3,184,574	-	-	-	-	-	-	-	**-**	-	-	-	**3,184,574**
Exposures in default	**220,892**	220,892	-	-	-	-	-	-	-	**-**	-	-	-	**220,892**
Exposures associated with particularly high risk	**-**	-	-	-	-	-	-	-	-	**-**	-	-	-	**-**
Covered bonds	**28,774**	1,814	-	-	-	-	5,653	17,154	4,154	**0**	-	-	0	**28,774**
Exposures to institutions and corporates with a short-term credit assessment	**-**	-	-	-	-	-	-	-	-	**-**	-	-	-	**-**
Exposures in the form of units or shares in undertakings for collective investment (UCIs)	**1,268,812**	1,268,812	-	-	-	-	-	-	-	**-**	-	-	-	**1,268,812**
Exposures to equities	**13,586**	13,586	-	-	-	-	-	-	-	**-**	-	-	-	**13,586**
Other assets	**643,643**	643,643	-	-	-	-	-	-	-	**-**	-	-	-	**643,643**
Total standardized approach	**30,477,386**	27,842,698	47,273	98,241	566,408	314,536	289,925	20,861	1,297,443	**186,574**	121,656	20,607	44,312	**30,663,960**
Total	**93,929,494**	88,228,773	230,189	283,427	632,730	394,908	1,003,384	1,073,853	2,082,229	**1,570,309**	313,859	980,611	275,840	**95,499,803**

Exposures by industry or counterparty type

Crédit Mutuel Arkéa has historically demonstrated good sector diversity in its exposures. This high degree of variety enables the group to reduce the concentration risk which could exist if it had significant exposure to one particular sector

Table 17 (CRB-D): Concentration of exposures by industry or counterparty type

(in € thousands)	Public administrations	Banks and financial institutions	CM Group subsidiaries (non-banks)	Individuals	Sole proprietorships	Farmers	Associations	Agribusiness and beverages	Other financial activities	Construction and building materials	Industrial goods and services	Chemicals	Retail	Holding companies and conglomerates	Real estate development
Governments and central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Credit institutions	0	6,429,811	0	0	0	0	0	0	0	0	0	0	0	0	0
Corporates	0	0	347,591	0	79,381	772,062	234,899	1,436,190	1,783,591	1,874,530	910,964	372,659	2,430,423	1,289,571	1,881,405
Retail customers	0	0	0	29,055,729	2,167,039	1,944,186	156,138	75,867	247,109	267,273	142,544	2,928	382,052	125,937	0
Equities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total IRB approach	0	6,429,811	347,591	29,055,729	2,246,420	2,716,248	391,037	1,512,057	2,030,700	2,141,803	1,053,507	375,586	2,812,475	1,415,508	1,881,405
Governments and central banks	15,620,489	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Credit institutions	5,860,782	387,164	0	0	0	0	0	0	0	0	0	0	0	0	0
Corporates	0	0	6,468	0	77	13,238	0	48,971	35,468	357	23,943	79,663	73,361	15,237	0
Retail customers	0	0	0	6,158,799	4,012	463	0	9	244	1,039	454	0	764	435	0
Equities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total standardized approach	21,481,271	387,164	6,468	6,158,799	4,088	13,700	0	48,980	35,712	1,396	24,396	79,663	74,124	15,672	0
Total	21,481,271	6,816,976	354,059	35,214,528	2,250,508	2,729,948	391,037	1,561,037	2,066,412	2,143,199	1,077,904	455,249	2,886,600	1,431,180	1,881,405

(in € thousands)	Other real estate (including leasing and real estate companies)	Automotive industry	Media	Oil and gas, commodities	Household products	Healthcare	Utilities	High technology	Telecommunications	Industrial transportation	Travel and leisure	Other	Equities	Other assets	**Total**
Governments and central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0**
Credit institutions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6,429,811**
Corporates	3,598,140	444,683	104,572	301,753	92,810	308,971	325,344	264,744	134,574	585,334	316,791	6,629	0	0	**19,897,609**
Retail customers	97,733	75,788	10,757	3,741	20,189	29,462	42,983	15,996	278	94,570	221,134	475	0	0	**35,179,909**
Equities	0	0	0	0	0	0	0	0	0	0	0	0	2,819,449	0	**2,819,449**
Other assets	0	0	-	0	0	0	0	0	0	0	0	-	-	509,065	**509,065**
Total IRB approach	3,695,873	520,471	115,329	305,495	112,999	338,432	368,327	280,740	134,852	679,904	537,926	7,104	2,819,449	509,065	**64,835,843**
Governments and central banks	0	0	0	0	0	0	0	0	0	0	0	-	-	-	**15,620,489**
Credit institutions	0	0	-	0	0	0	0	0	0	0	0	-	-	-	**6,247,946**
Corporates	591	154,738	105	119,771	0	12,628	23,194	59,921	6,237	25,888	83	-	-	-	**699,939**
Retail customers	82	2,051	87	0	19	285	0	69	0	468	266	0	-	-	**6,169,545**
Equities	0	0	-	0	0	0	0	0	0	0	0	0	1,282,398	-	**1,282,398**
Other assets	0	0	-	0	0	0	0	0	0	0	0	0	-	643,643	**643,643**
Total standardized approach	673	156,789	192	119,771	19	12,913	23,194	59,990	6,237	26,357	348	0	1,282,398	643,643	**30,663,960**
Total	3,696,546	677,260	115,521	425,266	113,019	351,346	391,521	340,730	141,089	706,260	538,274	7,104	4,101,846	1,152,708	**95,499,803**

Maturity of exposures

Table 18 (CRB-E): Maturity of exposures

(in € thousands)	On demand	≤ 1 year	1 to 5 years	> 5 years	No stated maturity	Total
Governments and central banks	0	0	0	0	0	0
Banks	72,092	3,236,636	2,840,832	216,740	63,511	6,429,811
Corporates	1,439,146	1,630,017	3,462,309	6,644,483	6,721,655	19,897,609
Retail customers	619,093	458,666	4,614,786	26,232,739	3,254,625	35,179,909
Equities	0	0	0	0	2,819,449	2,819,449
Other assets	0	0	0	0	509,065	509,065
Total IRB approach	2,130,331	5,325,319	10,917,927	33,093,962	13,368,304	64,835,843
Governments and central banks	50	5,358,982	1,509,519	798,382	60	7,666,993
Regional governments and local authorities	95,271	202,760	158,440	3,924,371	1,479,940	5,860,782
Public sector (public bodies excluding central governments)	13,084	298,780	379,141	971,185	5,974,329	7,636,519
Multilateral development banks	0	6,159	27,211	27,319	0	60,689
International organizations	0	1,553	254,735	0	0	256,288
Banks	0	10,547	50,406	5,198	292,240	358,390
Corporates	0	109,012	75,337	14,406	498,347	697,103
Retail customers	0	141,592	1,152,043	786,198	687,082	2,766,914
Exposures secured by a mortgage on immovable property	0	5,353	49,136	3,092,172	37,913	3,184,574
Exposures in default	0	29,737	33,614	142,199	15,342	220,892
Exposures associated with particularly high risk	0	0	0	0	0	0
Covered bonds	0	1,814	18,181	8,780	-	28,774
Exposures to institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
Exposures in the form of units or shares in undertakings for collective investment (UCIs)	0	0	0	0	1,268,812	1,268,812
Exposures to equities	0	0	0	0	13,586	13,586
Other assets	0	0	0	0	643,643	643,643
Total standardized approach	108,406	6,166,288	3,707,762	9,770,210	10,911,294	30,663,960
Total	2,238,737	11,491,607	14,625,689	42,864,172	24,279,598	95,499,803

VI.2. Credit quality of assets

A unified definition of default has been adopted for the entire Crédit Mutuel group. Based on the principle of aligning prudential information with accounting information (CRC 2002-03), this definition matches the Basel concept of loans in default and the accounting concept of non-performing loans and loans in litigation The computer software factors in contagion, extending the downgrading to related outstandings. The controls carried out by internal audit and by the statutory auditors ensure the reliability of the procedures for identifying defaults used to calculate capital requirements.

Definitions and quantitative information concerning overdue payments are also provided in Crédit Mutuel Arkéa's registration document, in the section entitled "Accounting principles and valuation methods".

Impairment provisions for credit risk

The new provisions introduced by the EBA Guidelines on credit risk management practices and the recognition of expected credit losses, which came into force on January 1, 2018 (IFRS 9), have resulted in the internal credit risk assessment methods being changed, in order to comply with Articles 114 and 115 of the November 3, 2014 administrative order.

This new approach is based on an expected loss impairment model and replaces the former approach (IAS 39) based on an incurred loss impairment model. Thus, the credit risk, and therefore any impairment provision, are recognized as soon as the loan is granted.

Each contract is subject to an "expected" credit loss calculation with risk parameters whose calculation methods and values are specific to Crédit Mutuel Arkéa. The calculation methods depend on the segmentation of the portfolios:

- HDP (High Default Portfolio): a portfolio with a high default rate (statistical modeling)
- LDP (Low Default Portfolio): a portfolio with a low default rate (expert models)

▪ **Allocating loans to the various buckets on the grant date**

At the time loans are granted, they are allocated to one of the three risk categories, known as a buckets, defined by the IFRS 9 regulations:

- a contract (loan or securities) on a sound counterparty is allocated, at the time of approval, to bucket 1 regardless of its risk level (ratings from A+ to E+ inclusive), unless it is a loan identified as a restructured loan. Such a loan will systematically be allocated to bucket 2.
- a contract (loan or securities) granted on a counterparty in default is allocated to bucket 3.

▪ **Allocation to the various buckets at each reporting date**

Changes in risk quality are analyzed at each reporting date. In this regard, the probability of default for each loan estimated on the initial recognition date is compared with its estimated probability of default on the reporting date.

Accordingly, at each quarter end and for each financial instrument, the allocation rule is as follows:

- In the event of a counterparty in default (see below for downgrading criteria), all the counterparty's contracts are allocated to bucket 3 (loans in default)
- In the event of a performing counterparty, absolute and relative criteria are reviewed. These criteria are as follows:

  – absolute criteria: contractual payments more than 30 days past due, contract in default the previous month, securities rated as speculative grade, and concept of restructured loans (forbearance);
  – relative criteria: comparison of the probabilities of default at the grant date and the probabilities of default at the reporting date for financial instruments with internal statistical models (High Default Portfolio) or comparison of the ratings at the grant date and the ratings at the reporting date (Low Default Portfolio).

An examination of these criteria determines whether the debt is maintained in its original bucket or transferred to another bucket (for example, transfer from bucket 1 to bucket 2 in the event of an increase in the risk, or transfer from bucket 2 to bucket 1 in the event of a reduction in the risk).

The methods used to calculate provisions differ according to the bucket to which the loan is allocated: the expected credit loss is assessed over a maximum period of one year in the case of loans in bucket 1, whereas it is calculated over the contract's residual life in the case of loans in bucket 2. For a given contract, the amount of the provision on bucket 2 is therefore greater than that of the provision on bucket 1.

These absolute and relative criteria are supplemented by consideration of forward-looking information (based on the method that integrates forward-looking data to assess the future changes in the parameters making up the expected credit losses: ECL).

As regards downgrading to default, the Arkéa group has opted for systematic downgrading in compliance with the accounting regulations on default (see CRC Regulation 2014-07 of November 26, 2014 on the accounting treatment of credit risk) and the Basel accords.

The criteria that result in a counterparty being downgraded to default are as follows:

- knowledge of collective proceedings (safeguard procedure, receivership or court-ordered liquidation);
- notification of the admissibility of over-indebtedness proceedings;
- knowledge of personal recovery proceedings in the case of retail customers;
- loan with amount(s) more than 90 days past due;
- current account(s) with an irregular debit balance for more than 90 days, with a materiality threshold of €150, it being specified that after a period of 6 months the counterparty is downgraded to default, regardless of the outstanding amount;
- out-of-court recovery that has become impossible;
- contagion of the default according to the rules used in the Basel regulations;
- doubt as to the ability of a debtor to honor all or part of its commitments, when its situation presents characteristics such that regardless of the existence of any unpaid debt, it can be concluded that there is a proven risk. This is particularly the case where the debtor's worsened financial situation gives rise to a risk of non-recovery;
- for loans considered to be restructured: payment arrears of more than 30 days or a new restructuring measure.

All receivables due from these counterparties are systematically allocated to bucket 3, and are the subject of a single provision allocated for loan impairment.

As of December 31, 2018, the breakdown of outstandings and provisions by bucket was as follows:

(in € thousands)	Balance sheet exposures	Provisions
Bucket 1	72,758,709	122,400
Bucket 2	2,476,449	135,626
Bucket 3	1,433,789	807,663

(in € thousands)	Off-balance sheet exposures	Provisions
Bucket 1	13,065,252	11,992
Bucket 2	359,594	2,928
Bucket 3	85,863	28,794

Restructured exposures

Exposures are restructured as a result of the debtor's financial difficulties. This involves the group making concessions to the debtor (changes in the contract terms such as the rate or term, partial waiver, additional financing that would not have been granted in the absence of such difficulties, etc.). The group has the means in its IT systems to identify restructured exposures in its performing and non-performing portfolios, which are defined using the principles set out by the EBA on October 23, 2013. Restructuring results, as a minimum, in a transfer to bucket 2.

The following tables provide a breakdown of outstanding non-performing loans and loans in litigation and the related provisions at December 31, 2018 according to their business sector or counterparty type, their Basel treatment method and their geographic area.

Table 19 (CR1-A): Credit quality of exposures by exposure class and instrument

(in € thousands)	Gross exposures: Performing exposures	Gross exposures: Non-performing exposures	Provisions	Net exposures
Governments and central banks	-	-	-	-
Credit institutions	6,431,722	-	1,911	6,429,811
Corporates	19,849,067	436,144	387,602	19,897,609
Of which: Specialized financing	212,387	-	-	212,387
Of which: SMEs	6,989,531	234,362	179,710	7,044,183
Retail customers	34,995,474	674,825	490,390	35,179,909
Exposures secured by a mortgage on immovable property	19,641,436	285,990	194,589	19,732,837
SMEs	7,969,349	394,849	284,810	8,079,388
Non-SMEs	17,274,259	164,173	113,500	17,324,932
Revolving	266,902	5,566	5,387	267,080
Other - retail customers	15,087,136	383,269	290,414	15,179,991
SMEs	5,602,171	273,032	203,721	5,671,483
Non-SMEs	9,484,965	110,237	86,693	9,508,509
Equities	2,819,449	-	-	2,819,449
Other assets	503,466	5,599	-	509,065
Total IRB approach	64,599,178	1,116,567	879,902	64,835,843
Governments and central banks	7,670,333	-	3,341	7,666,992
Regional governments and local authorities	5,863,701	-	2,645	5,861,056
Public sector (public bodies excluding central governments)	7,642,108	-	5,863	7,636,245
Multilateral development banks	60,689	-	-	60,689
International organizations	256,288	-	-	256,288
Credit institutions	358,390	-	-	358,390
Corporates	701,397	-	4,294	697,103
Of which: SMEs	61,968	-	-	61,968
Retail customers	2,810,322	-	43,408	2,766,914
Of which: SMEs	243,846	-	11	243,835
Exposures secured by a mortgage on immovable property	3,184,574	-	-	3,184,574
Of which: SMEs	-	-	-	-
Exposures in default	-	388,833	167,941	220,892
Exposures associated with particularly high risk	-	-	-	-
Covered bonds	28,774	-	-	28,774
Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-
Exposures in the form of units or shares in undertakings for collective investment (UCIs)	1,268,812	-	-	1,268,812
Exposures to equities	13,586	-	-	13,586
Other assets	643,643	-	-	643,643
Total standardized approach	30,502,619	388,833	227,491	30,663,960
Total	95,101,797	1,505,400	1,107,394	95,499,803

Table 20 (CR1-B): Credit quality of exposures by business sector or counterparty type

(in € thousands)	Gross exposures		Provisions	Net exposures
	Performing exposures	Non-performing exposures		
Public administrations	21,493,120	0	11,849	21,481,271
Banks	6,818,887	0	1,911	6,816,976
CM Group subsidiaries (non-banks)	354,091	0	32	354,059
Individuals	36,122,639	763,572	484,725	36,401,486
Sole proprietorships	2,306,261	71,150	56,372	2,321,039
Farmers	2,723,403	144,017	114,312	2,753,108
Associations	388,464	730	3,015	386,179
Agribusiness and beverages	1,459,948	15,303	14,633	1,460,618
Other financial activities	1,963,719	84,198	74,726	1,973,191
Construction and building materials	2,060,569	39,984	30,658	2,069,895
Industrial goods and services	1,012,780	43,705	31,017	1,025,468
Chemicals	376,120	361	2,219	374,263
Retail	2,709,378	102,664	74,627	2,737,415
Holding companies and conglomerates	1,365,697	36,471	33,882	1,368,285
Real estate development	1,799,425	29,753	28,382	1,800,796
Other real estate (including leasing and real estate companies)	3,545,928	21,016	25,333	3,541,611
Automotive industry	535,519	10,622	9,474	536,667
Media	105,880	10,548	4,783	111,645
Oil and gas, commodities	310,567	45,423	37,392	318,597
Household products	107,412	9,365	6,665	110,112
Healthcare	329,896	1,592	2,896	328,592
Utilities	356,823	7,590	4,509	359,904
High technology	281,222	1,679	1,967	280,934
Telecommunications	130,167	30	128	130,069
Industrial transportation	664,980	22,381	23,026	664,335
Travel and leisure	517,515	43,139	28,746	531,908
Other	6,834	107	115	6,826
Equities	4,101,846	0	0	4,101,846
Other assets	1,152,708	0	0	1,152,708
Total	**95,101,797**	**1,505,400**	**1,107,394**	**95,499,803**

Table 21 (CR1-C): Credit quality of exposures by geographic area

(in € thousands)	Gross exposures		Provisions	Net exposures
	Performing exposures	Non-performing exposures		
Europe	**93,535,827**	**1,498,730**	**1,105,064**	**93,929,494**
France	87,835,116	1,496,842	1,103,185	88,228,773
Germany	230,244	-	-	230,244
Belgium	283,407	161	141	283,427
Spain	632,728	5	3	632,730
Luxembourg	395,060	-	152	394,908
Netherlands	1,002,897	1,639	1,153	1,003,384
UK	1,074,140	82	369	1,073,853
Other	2,082,235	0	61	2,082,174
Rest of the world	**1,565,970**	**6,670**	**2,330**	**1,570,309**
USA	309,583	6,392	2,116	313,859
Canada	980,611	-	-	980,611
Other	275,776	278	214	275,839
Total	**95,101,797**	**1,505,400**	**1,107,394**	**95,499,803**

Table 22 (CR1-D): Aging of past-due exposures

(in € thousands)	Gross carrying values							
	Performing exposures			Non-performing exposures				
	No past due amounts or past due ≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	Payment unlikely but no past due amounts or past due ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	1 to 5 years	> 5 years
Debt securities	10,924,635	-	-	-	-	-	-	-
Loans and advances	69,645,143	64,040	31,791	356,262	122,535	165,731	426,716	352,283
TOTAL	**80,569,778**	**64,040**	**31,791**	**356,262**	**122,535**	**165,731**	**426,716**	**352,283**

Table 23 (CR1-E): Non-performing and forborne exposures

(in € thousands)	Gross carrying values 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 past due > 30 days ≤ 90 days	of which performing forborne	of which non-performing				on performing exposures		on non-performing exposures		on non-performing exposures	of which forborne exposures
					of which defaulted	of which impaired	of which forborne		of which forborne		of which forborne		
Debt securities	10,924,635	-	-	-	-	-	-	7,576	-	4,203	-	-	-
Loans and advances	71,164,502	95,832	81,261	1,423,527	1,423,527	1,423,527	375,045	254,416	6,678	832,716	165,148	810,648	
Off-balance sheet items	13,603,625			81,873	81,873	81,873		14,920		28,794		5,984	

VI.3. Reconciliation of credit risk adjustments

Table 24 (CR2-A): Change in the balance of general and specific credit risk adjustments

(in € thousands)	Accumulated specific credit risk adjustments	Accumulated general credit risk adjustments
Opening balance	**- 881,288**	**- 266,134**
Period additions	- 233,983	- 166,665
Period reversals	173,914	167,493
Reversals due to derecognition of balance sheet assets	76,872	
Transfer between credit risk adjustments	6,007	- 6,007
Exchange rate differences	-	-
Business combinations, including acquisitions/disposals of subsidiaries	- 7,091	- 2,452
Other	- 144	- 3,147
Closing balance	**- 865,713**	**- 276,912**
Recoveries on assets previously written off	6,349	-
Amounts written off	- 85,100	-

VI.4. Standardized approach

Exposures dealt with under the standardized approach are set out in the following table.

The group uses assessments by rating agencies to measure the risk on exposures relating to governments and central banks. The group also relies on ratings provided by Banque de France for corporate exposures.

The cross-reference table used to link the credit quality steps to the external ratings taken into consideration is that defined in the regulations.

Table 25 (CR5): Breakdown of exposures under the standardized approach

(in € thousands)	Risk weights																
Exposure classes	**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1250%**	**Other**	**Deducted**	**Total**
Governments and central	7,577,623	-	-	-	-	-	-	-	-	-	-	89,369	-	-	-	-	7,666,992
Regional governments and local authorities	-	-	-	-	5,860,782	-	-	-	-	-	-	-	-	-	-	-	5,860,782
Public sector (public bodies excluding central governments)	7,636,519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,636,519
Multilateral development banks	60,689	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60,689
International organizations	256,288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	256,288
Credit institutions	4	-	-	-	71,402	-	286,983	-	-	-	-	-	-	-	-	-	358,390
Corporates	-	-	-	-	26,614	-	81,316	-	-	576,344	12,828	-	-	-	-	-	697,103
Retail customers	-	-	-	-	-	-	-	-	2,766,914	-	-	-	-	-	-	-	2,766,914
Exposures secured by a mortgage on immovable property	-	-	-	-	-	2,754,636	-	-	429,939	-	-	-	-	-	-	-	3,184,574
Exposures in default	-	-	-	-	-	-	-	-	-	203,159	17,733						220,892
Exposures presenting a particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Covered bonds	-	-	-	28,774	-	-	-	-	-	-	-	-	-	-	-	-	28,774
Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exposures in the form of units or shares in undertakings for collective investment (UCIs)	-	-	-	-	-	-	1,259,286	-	-	9,526	-	-	-	-	-	-	1,268,812
Exposures to equities	-	-	-	-	-	-	-	-	-	1,856	-	11,730	-	-	-	-	13,586
Other assets	-	-	-	-	-	-	-	-	-	643,643	-	-	-	-	-	-	643,643
Total	15,531,125	-	-	28,774	5,958,798	2,754,636	1,627,586	-	3,196,853	1,434,529	30,561	101,099	-	-	-	-	30,663,960

Exposures to central governments and central banks (sovereign) are weighted exclusively at 0%. The sovereign outstandings weighted at 250% correspond to deferred tax assets.

VI.5. Internal ratings-based approach

Rating procedures and parameters

Rating algorithms and expert models have been developed to improve credit risk assessment at Crédit Mutuel and to comply with the regulatory requirements concerning internal ratings-based approaches.

The Confédération Nationale du Crédit Mutuel is responsible for defining the rating methodologies for all portfolios. Crédit Mutuel Arkéa provides the Confederation with human resources dedicated to developing and maintaining statistical models. In addition, it is directly involved in developing and approving working group projects on specific issues, as well as in work related to data quality and application acceptance testing.

The counterparty rating system is used throughout Crédit Mutuel.

Probability of default (PD) is the likelihood that a counterparty will default within a one-year period. Crédit Mutuel Arkéa counterparties eligible for internal approaches are rated by a single system using:

- statistical algorithms or "mass ratings", based on one or more models, factoring in a selection of variables which are representative and predictive of credit risk;
- rating grids developed by experts.

These models are used to differentiate and correctly classify risk. The scale reflects the manner in which the risk changes and is broken down into eleven positions including nine performing positions (A+, A-, B+, B-, C+, C-, D+, D- and E+) and two default positions (E- and F).

In the so-called "mass" Corporate and Retail scopes, following the internal rating process, each borrower is allocated a rating. Based on this rating as well as other characteristics, performing borrowers are grouped into homogeneous risk classes, prior to the process of measuring the regulatory parameter PD (probability of default). The grouping analyses are carried out on the segments defined for the purposes of modeling the algorithms. A risk class's probabilities of default are then estimated on the basis of the historical default rates observed on the exposures belonging to this class, based on a record of more than ten years of observations. Prudence margins are taken into account so as to factor in the uncertainty of estimates.

In the other scopes, too few defaults are available to ensure the relevance and reliability of statistical estimates. The probabilities of default associated with the internal ratings are calibrated on the basis of external data.

Loss given default (LGD) is the ratio of the loss on an exposure in the event of a counterparty default to the amount of exposure at the time of default, including also additional drawdowns made after the transfer to non-performing.

Internal models for estimating LGD have been developed by the group and approved for the Bank, Corporate and Retail exposure classes.

In the "mass" Corporate and Retail scopes, LGD is calculated separately for each class, the classes being defined according to the type of loan and the nature of the collateral. LGD is estimated based on the updated monthly collections observed for each class. Prudence margins are taken into account so as to factor in the uncertainty of estimates and the downturn nature of the LGD. The calculations are based on an internal record of defaults and losses covering more than ten years.
In the other scopes, for which there are too few defaults to ensure the relevance and reliability of statistical estimates, LGDs are estimated on the basis of quantitative information and expert-based

modeling using benchmarks and external data as part of a conservative approach (the downturn effect is taken into account).

The **conversion factor** (CCF) corresponds to the ratio of the portion currently undrawn of a credit line that could be drawn and would therefore be exposed in the event of default to the portion of said credit line currently undrawn.

In the case of the Corporate and retail customer portfolios, the conversion factors (CCF) are calculated in accordance with an internal method approved for financing commitments. In the case of guarantee commitments and the bank exposure class, regulatory values (foundation method) are applied.

In the Corporate and Retail scopes, the internal CCFs are estimated based on average historical CCFs weighted by the number of contracts, using a product-focused segmentation. They are calibrated on the basis of internal data.

The parameters used to calculate weighted risks are national and apply to all Crédit Mutuel entities.

Model mapping

Modeled parameter	Exposure class	Portfolios	Number of models	Methodology
PD	**Banks**	Financial institutions	2 models: Banks and covered bonds	Expert-type models based on grids comprising qualitative and quantitative variables
	Corporates	Large corporates (revenue >€500 million)	6 models according to the type of counterparty and sector	Expert-type models based on grids comprising qualitative and quantitative variables
		"Mass" corporates (revenue <€500 million)	3 models	Quantitative-type models with expert qualitative grids
		Acquisition financing, large corporates	1 model	Expert-type model based on a grid comprising qualitative and quantitative variables
		Acquisition financing, corporates	1 model	Quantitative-type models combined with expert qualitative grids
		Specialized financing	SF - assets: 6 models according to the type of asset, SF - projects: 4 models according to the sector, SF - real estate: 1 model	Expert-type models based on grids comprising qualitative and quantitative variables
		Other corporates	2 models: Real estate companies and insurance companies	Expert-type models based on grids comprising qualitative and quantitative variables

	Retail	Individuals	6 models according to the type of loan (real estate loan, overdraft, etc.)	Quantitative-type models
		Corporate bodies	4 models according to the type of customer	Quantitative-type models
		Sole traders	3 models according to the type of profession (retailers, artisans, etc.)	Quantitative-type models
		Farmers	6 models according to the account status and the type of activity (cyclical or not)	Quantitative-type models
		Non-profit organizations	1 model	Quantitative-type models
		Real estate trusts	1 model	Quantitative-type models
LGD	**Banks**	Financial institutions	1 model	Expert-type model depending on the counterparty and the contract, based on quantitative and qualitative information
	Corporates	Large corporates, Acquisition financing, Real estate companies and Insurance companies	1 model, with sector parameters	Expert-type model depending on the counterparty and the contract, based on quantitative and qualitative information
		"Mass" corporates	1 model applied to 8 segments according to the type of loan and the nature of the collateral	Quantitative-type models based on internal collection flows
	Retail		1 model applied to 10 segments according to the type of loan and the nature of the collateral	Quantitative-type models based on internal collection flows
CCF	**Corporates**	"Mass" corporates	1 model applied to 4 segments according to the type of loan	Quantitative model, CCFs calibrated using internal data
	Retail		1 model applied to 8 segments according to the type of loan	Quantitative model, CCFs calibrated using internal data

Table 26 (CR6): Internal ratings-based approach – Credit risk exposures by exposure class and PD range

(in € thousands)	PD scale	Original balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Average LGD	Average maturity	Risk weighted assets (RWA)	Weighting	Expected loss (EL)	Value adjustments and provisions
Credit institutions												
	0.00 to < 0.15	6,207,859	25,804	100%	6,226,247	0.04%	24.97%	2.5	735,755	12%	672	-
	0.15 to < 0.25	137,882	39,463	99%	167,479	0.23%	37.35%	2.5	93,005	56%	144	-
	0.25 to < 0.50	20,592	-	100%	20,592	0.44%	98.67%	2.5	41,234	200%	89	-
	0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-
	0.75 to < 2.50	122	-	100%	122	1.02%	27.50%	2.5	94	77%	0	-
	2.50 to < 10.00	-	-	-	-	-	-	-	-	-	-	-
	10.00 to < 100.00	-	-	-	-	-	-	-	-	-	-	-
	100.00 (default)	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	6,366,455	65,267	99.67%	6,414,440	0.05%	25.53%	2.5	870,088	14%	906	1,911
Corporates												
	0.00 to < 0.15	1,420,238	738,977	98%	1,881,123	0.10%	33.71%	2.5	420,160	22%	596	-
	0.15 to < 0.25	-	-	-	-	-	-	-	-	-	-	-
	0.25 to < 0.50	3,084,275	1,852,099	94%	4,013,373	0.34%	31.87%	2.5	1,732,386	43%	4,362	-
	0.50 to < 0.75	2,104,890	868,410	94%	2,539,233	0.56%	24.12%	2.5	1,027,562	40%	3,415	-
	0.75 to < 2.50	4,934,703	2,433,345	95%	6,283,751	1.32%	30.23%	2.5	4,291,960	68%	24,009	-
	2.50 to < 10.00	1,358,375	537,298	95%	1,686,305	4.20%	29.74%	2.5	1,613,367	96%	20,474	-
	10.00 to < 100.00	257,778	46,293	96%	283,646	19.66%	24.07%	2.5	364,516	129%	13,384	-
	100.00 (default)	368,438	67,705	96%	412,232	100.00%	65.60%	2.5	202,953	49%	277,457	-
	Subtotal	13,528,697	6,544,126	95%	17,099,665	3.81%	30.79%	2.5	9,652,903	56%	343,698	387,602
Of which: SMEs												
	0.00 to < 0.15	-	-	-	-	-	-	-	-	-	-	-
	0.15 to < 0.25	-	-	-	-	-	-	-	-	-	-	-
	0.25 to < 0.50	988,624	246,433	95%	1,122,080	0.31%	23.26%	2.5	327,397	29%	815	-
	0.50 to < 0.75	1,305,249	314,501	95%	1,474,508	0.56%	23.58%	2.5	572,471	39%	1,942	-
	0.75 to < 2.50	2,282,368	822,537	95%	2,784,593	1.37%	24.36%	2.5	1,533,886	55%	9,368	-
	2.50 to < 10.00	694,658	191,877	95%	812,687	4.39%	24.15%	2.5	622,437	77%	8,661	-
	10.00 to < 100.00	124,124	19,159	96%	132,035	20.30%	23.61%	2.5	164,540	125%	6,273	-
	100.00 (default)	212,329	22,033	96%	220,682	100.00%	75.43%	2.5	120,715	55%	156,802	-
	Subtotal	5,607,353	1,616,541	95%	6,546,585	5.09%	25.68%	2.5	3,341,445	51%	183,862	179,710
Retail customers												
	0.00 to < 0.15	15,212,806	1,149,553	94%	15,804,327	0.07%	14.55%	-	426,808	3%	1,552	-
	0.15 to < 0.25	4,797,124	437,569	93%	5,023,655	0.18%	15.49%	-	286,688	6%	1,438	-
	0.25 to < 0.50	4,903,803	514,327	95%	5,208,972	0.36%	15.05%	-	448,971	9%	2,857	-
	0.50 to < 0.75	875,556	221,900	93%	999,460	0.62%	19.71%	-	139,648	14%	1,200	-
	0.75 to < 2.50	3,318,873	436,428	94%	3,552,720	1.34%	16.36%	-	668,963	19%	7,950	-
	2.50 to < 10.00	2,054,313	457,131	94%	2,261,878	4.77%	16.29%	-	682,631	30%	17,594	-
	10.00 to < 100.00	574,978	41,114	96%	595,348	19.99%	17.74%	-	309,087	52%	20,775	-
	100.00 (default)	662,407	12,418	99%	668,805	100.00%	50.35%	-	170,804	26%	323,057	-
	Subtotal	32,399,860	3,270,439	94%	34,115,165	2.90%	15.98%	-	3,133,600	9%	376,423	490,390
Of which: Exposures secured by a mortgage on immovable property												
	0.00 to < 0.15	10,853,114	384,280	95%	11,011,054	0.06%	13.71%	-	266,091	2%	972	-
	0.15 to < 0.25	2,756,999	69,640	95%	2,785,628	0.18%	13.78%	-	141,749	5%	679	-
	0.25 to < 0.50	2,794,604	50,315	96%	2,815,373	0.37%	14.29%	-	244,762	9%	1,497	-
	0.50 to < 0.75	99,260	1,758	97%	100,079	0.63%	15.32%	-	11,860	12%	98	-
	0.75 to < 2.50	1,474,158	31,848	95%	1,487,258	1.20%	14.08%	-	284,482	19%	2,523	-
	2.50 to < 10.00	798,528	99,051	90%	839,259	4.63%	14.20%	-	363,235	43%	5,526	-
	10.00 to < 100.00	225,988	1,893	97%	226,770	20.43%	14.47%	-	168,253	74%	6,703	-
	100.00 (default)	285,285	705	99%	285,579	100.00%	45.41%	-	80,275	28%	123,254	-
	Subtotal	19,287,935	639,491	95%	19,551,000	2.11%	14.33%	-	1,560,707	8%	141,251	194,589
Of which: SMEs												
	0.00 to < 0.15	-	-	-	-	-	-	-	-	-	-	-
	0.15 to < 0.25	572,755	7,130	97%	575,692	0.16%	14.06%	-	22,491	4%	132	-
	0.25 to < 0.50	955,705	8,595	97%	959,328	0.38%	15.39%	-	75,770	8%	561	-
	0.50 to < 0.75	83,509	1,261	97%	84,123	0.65%	15.66%	-	9,998	12%	86	-
	0.75 to < 2.50	377,130	3,281	96%	378,489	1.40%	15.18%	-	71,534	19%	803	-
	2.50 to < 10.00	248,871	2,990	96%	250,120	4.54%	15.34%	-	94,920	38%	1,753	-
	10.00 to < 100.00	105,598	354	97%	105,747	19.66%	15.38%	-	70,039	66%	3,208	-
	100.00 (default)	121,509	307	99%	121,640	100.00%	50.76%	-	30,938	25%	59,274	-
	Subtotal	2,465,076	23,918	97%	2,475,138	6.64%	16.79%	-	375,691	15%	65,818	81,089

Of which: Non-SMEs											
0.00 to < 0.15	10,853,114	384,280	95%	11,011,054	0.06%	13.71%	-	266,091	2%	972	-
0.15 to < 0.25	2,184,244	62,510	95%	2,209,936	0.18%	13.71%	-	119,258	5%	546	-
0.25 to < 0.50	1,838,899	41,720	95%	1,856,046	0.37%	13.72%	-	168,992	9%	936	-
0.50 to < 0.75	15,751	498	97%	15,956	0.53%	13.56%	-	1,863	12%	11	-
0.75 to < 2.50	1,097,028	28,568	95%	1,108,769	1.13%	13.71%	-	212,948	19%	1,720	-
2.50 to < 10.00	549,657	96,061	90%	589,139	4.67%	13.71%	-	268,315	46%	3,773	-
10.00 to < 100.00	120,391	1,539	97%	121,023	21.10%	13.67%	-	98,214	81%	3,495	-
100.00 (default)	163,776	397	99%	163,939	100.00%	41.43%	-	49,337	30%	63,981	-
Subtotal	16,822,859	615,573	95%	17,075,862	1.45%	13.97%	-	1,185,017	7%	75,433	113,500
Of which: Revolving											
0.00 to < 0.15	18,070	78,956	60.7%	33,940	0.08%	34.10%	-	634	2%	10	-
0.15 to < 0.25	9,936	27,432	61.0%	15,450	0.21%	34.10%	-	614	4%	11	-
0.25 to < 0.50	5,923	10,322	61.5%	7,998	0.36%	34.10%	-	501	6%	10	-
0.50 to < 0.75	12,549	23,919	61.5%	17,357	0.53%	34.10%	-	1,466	8%	31	-
0.75 to < 2.50	27,106	27,883	63.0%	32,711	1.62%	34.10%	-	6,410	20%	181	-
2.50 to < 10.00	9,961	6,243	68.1%	11,216	4.75%	34.10%	-	4,719	42%	182	-
10.00 to < 100.00	6,525	2,075	76.1%	6,942	16.45%	34.10%	-	5,838	84%	389	-
100.00 (default)	5,508	58	98.4%	5,519	100.00%	67.15%	-	943	17%	3,631	-
Subtotal	95,579	176,889	62.9%	131,134	6.03%	35.49%	-	21,124	16%	4,444	5,387
Of which: Other - retail customers											
0.00 to < 0.15	4,341,622	686,316	97%	4,759,333	0.07%	16.35%	-	634	0%	10	-
0.15 to < 0.25	2,030,188	340,497	93%	2,222,577	0.19%	17.51%	-	57,332	3%	356	-
0.25 to < 0.50	2,103,276	453,690	94%	2,385,600	0.35%	15.89%	-	99,062	4%	760	-
0.50 to < 0.75	763,747	196,223	94%	882,024	0.62%	19.92%	-	73,864	8%	740	-
0.75 to < 2.50	1,817,609	376,697	94%	2,032,751	1.44%	17.75%	-	192,070	9%	3,129	-
2.50 to < 10.00	1,245,825	351,836	94%	1,411,404	4.85%	17.39%	-	220,048	16%	9,187	-
10.00 to < 100.00	342,464	37,146	95%	361,636	19.79%	19.47%	-	84,845	23%	9,704	-
100.00 (default)	371,615	11,655	98%	377,707	100.00%	53.84%	-	63,115	17%	146,038	-
Subtotal	13,016,346	2,454,059	95%	14,433,031	3.94%	18.03%	-	790,971	5%	169,923	290,414
Of which: SMEs											
0.00 to < 0.15	-	-	0%	-	-	-	-	-	-	-	-
0.15 to < 0.25	932,459	158,132	90%	1,010,827	0.19%	17.68%	-	56,718	6%	345	-
0.25 to < 0.50	1,155,832	154,988	91%	1,221,932	0.36%	17.16%	-	98,562	8%	750	-
0.50 to < 0.75	530,844	107,420	92%	581,134	0.66%	18.46%	-	72,399	12%	708	-
0.75 to < 2.50	1,026,366	180,658	91%	1,111,914	1.49%	17.82%	-	185,661	17%	2,949	-
2.50 to < 10.00	922,910	175,568	92%	1,006,129	4.95%	18.01%	-	215,329	21%	9,005	-
10.00 to < 100.00	233,010	23,984	94%	244,528	20.90%	18.22%	-	79,008	32%	9,315	-
100.00 (default)	263,806	9,226	97%	268,375	100.00%	54.92%	-	62,172	23%	142,407	-
Subtotal	5,065,227	809,977	91%	5,444,838	7.27%	19.59%	-	769,847	14%	165,479	203,721
Of which: Non-SMEs											
0.00 to < 0.15	4,341,622	686,316	97%	4,759,333	0.07%	16.35%	-	160,083	3%	570	-
0.15 to < 0.25	1,097,729	182,365	97%	1,211,750	0.19%	17.36%	-	87,606	7%	403	-
0.25 to < 0.50	947,444	298,702	96%	1,163,668	0.35%	14.56%	-	105,147	9%	600	-
0.50 to < 0.75	232,902	88,803	97%	300,889	0.53%	22.76%	-	53,923	18%	363	-
0.75 to < 2.50	791,243	196,039	97%	920,836	1.38%	17.66%	-	192,411	21%	2,297	-
2.50 to < 10.00	322,915	176,268	97%	405,275	4.60%	15.87%	-	99,348	25%	2,881	-
10.00 to < 100.00	109,455	13,162	99%	117,108	17.45%	22.08%	-	55,988	48%	4,368	-
100.00 (default)	107,809	2,428	100%	109,332	100.00%	51.18%	-	27,415	25%	53,765	-
Subtotal	7,951,119	1,644,083	97%	8,988,193	1.92%	17.08%	-	781,922	9%	65,249	86,693
Total	**52,295,013**	**9,879,832**	**94%**	**57,629,271**	**2.86%**	**21.44%**	**2.5**	**13,656,591**	**24%**	**721,027**	**879,902**

For the long term, governments and central banks will be subject to the standardized approach, specialized financing to the slotting criteria method and equities to the simple weighting method.

Backtesting

The quality of the internal rating system is monitored based on procedures that detail the topics reviewed, the warning thresholds and the responsibilities of the participants. These documents are updated by the Confédération Nationale du Crédit Mutuel Risk department if necessary as decisions are ratified.

Reporting on the monitoring of mass rating models involves three main areas of study: stability, performance and additional analyses. This reporting is carried out for each mass rating model on a quarterly basis and supplemented with half-yearly and annual controls and monitoring work, for which the levels of detail are higher (all of the elements making up each of the models are analyzed).

As regards the expert grids, the system includes a complete annual review based on performance tests (analysis of rating concentrations, transition matrices and consistency with the external rating system).

Default probabilities are monitored annually before any new estimates of the regulatory parameter. Depending on the portfolios, this is supplemented with interim monitoring on a half-yearly basis. The arrangements for monitoring loss given default (LGD) and the conversion factors for off-balance sheet commitments (CCF) are implemented annually. Their main objective is to validate the values taken by these parameters for each segment. In the case of LGD, this validation is carried out mainly by checking the robustness of the methods for calculating the prudential margins and by comparing the LGD estimators with the most recent data and actual figures. As regards the CCF, it is validated by reconciling the estimators with the most recent CCFs observed.

Table 27 (CR9): Internal ratings-based approach - Back-testing of probability of default by exposure class

The figures observed for Crédit Mutuel as a whole and applied by Crédit Mutuel Arkéa are as follows:

	Weighted average PD	Average default rate
Credit institutions	0.11%	0.00%
Corporates	1.52%	1.24%
Retail customers	1.30%	1.04%

Permanent and periodic control

Crédit Mutuel Arkéa's permanent control plan for Basel III credit risk comprises two levels:

- at CNCM level, permanent control is involved in validating new models and significant adjustments made to existing models on the one hand, and on the other, the permanent monitoring of the internal rating system (particularly the parameters used to calculate regulatory capital requirements).
- at the Crédit Mutuel Arkéa level, permanent control verifies the overall adoption of the internal rating system, the operational aspects related to the production and calculation of the ratings, the credit risk management procedures directly related to the internal rating system, and the quality of the data.

In terms of periodic control, Crédit Mutuel Arkéa’s Internal Audit and Periodic Control department operates according to a CNCM framework procedure that defines the types of assignments to be carried out on an ongoing basis on the Basel III credit risk framework as well as the division of responsibilities between the regional and national audit units.

Additional quantitative information

Table 28 (CR8): Risk-weighted asset (RWA) flow statement of credit risk exposures under the internal ratings-based approach

(in € thousands)	**Risk weighted assets (RWA)**	**Capital requirements**
12.31.2017	**11,988,725**	**959,098**
Amount of assets	1,631,170	130,494
Asset quality	36,697	2,936
Updating of templates	-	-
Methodology and policy	-	-
Acquisitions and disposals	-	-
Currency movements	-	-
Other	-	-
12.31.2018	**13,656,591**	**1,092,527**

The risk-weighted assets (RWA) of specialized Financing exposures are obtained using the slotting criteria method.

The risk-weighted assets (RWA) of equity exposures are obtained using the simple risk-weighted approach, which involves applying specific risk weightings to the carrying amounts of the exposures.

Table 29 (CR10): Specialized financing and equities

				Specialized financing			
(in € thousands)		a	b	c	d	e	f
Regulatory categories	**Residual maturity**	**Amount on balance sheet**	**Amount off balance sheet**	**Weighting**	**Amount of exposure**	**Risk weighted assets (RWA)**	**Expected losses**
Category 1	Less than 2.5 years	4,138	-	50%	4,138	2,069	-
	2.5 years or more	147,536	60,713	70%	193,071	135,150	772
Category 2	Less than 2.5 years	-	-	70%	-	-	-
	2.5 years or more	-	-	90%	-	-	-
Category 3	Less than 2.5 years	-	-	115%	-	-	-
	2.5 years or more	-	-	115%	-	-	-
Category 4	Less than 2.5 years	-	-	250%	-	-	-
	2.5 years or more	-	-	250%	-	-	-
Category 5	Less than 2.5 years	-	-	-	-	-	-
	2.5 years or more	-	-	-	-	-	-
Total	**Less than 2.5 years**	4,138	0	50%	4,138	2,069	0
	2.5 years or more	147,536	60,713	70%	193,071	135,150	772

(in € thousands)			Equity category	
Categories	**Amount of exposure**	**Weighting**	**Risk weighted assets (RWA)**	**Capital requirements**
Internal ratings-based approach	**2,819,449**		**9,080,778**	**726,462**
Private equity	524,964	190%	997,432	79,795
Significant financial sector holdings	218,616	250%	546,540	43,723
Exposures to listed equities	179,883	290%	521,661	41,733
Other equity exposures	1,895,985	370%	7,015,145	561,212
Standardized approach	**274,969**		**179,285**	**14,343**
Of which private equity	-	150%	-	-
Total	**3,094,418**		**9,260,063**	**740,805**

Equity investments deducted from capital	0

Total unrealized gains and losses included in capital	8,888
of which unrealized gains included in Tier 2 capital	0

VII. Counterparty credit risk

Counterparty credit risk corresponds to the risk incurred on:

- derivative instruments in the banking book and the trading book;
- repo transactions in the banking book.
- The outstandings in question are included in the credit risk management reports (in the same way as on-balance sheet and off-balance sheet outstandings). The sum of the exposures and risks for all outstandings (balance sheet, off-balance sheet, derivatives and repurchase agreements) gives an overall view of credit risks. For Crédit Mutuel Arkéa, counterparty credit risk is a very small component of overall credit risk.

The exposure value for counterparty credit risk for derivatives is calculated in accordance with Chapter 6 of the CRR, using the market price method. There are no specific provisions concerning the manner in which capital requirements are then determined: the weighting applied to the EAD depends on the segmentation applicable to the instrument (in particular, in the IRBA scope, to determine the probability of default and the loss given default).

Risk mitigation techniques for repo transactions are taken into account in accordance with Chapter 4 of the CRR and are presented below in the section entitled "Credit risk mitigation techniques".

Quantitative information

Table 30 (CCR1): Analysis of counterparty credit risk (CCR) exposure by approach

	(in € thousands)	Notional amounts	Replacement cost/current market value	Potential future credit exposure	Effective expected positive exposure	Multiplier	EAD post-CRM	Risk weighted assets (RWA)
1	Market price method		113,325	421,502			534,827	244,894
2	Original Exposure	-					-	-
3	Standardized approach		-			-	-	-
4	Internal model method (IMM) (for derivatives and SFTs)				-	-	-	-
5	*Of which securities financing transactions*				-	-	-	-
6	*Of which derivatives and long settlement transactions*				-	-	-	-
7	*Of which from contractual cross-product netting*				-	-	-	-
8	Financial collateral simple method (for SFTs)						-	-
9	Financial collateral general method (for SFTs)						80,138	12,912
10	VaR for SFTs						-	-
11	**Total**						**614,965**	**257,806**

Table 31 (CCR2): CVA capital requirement

	(in € thousands)	Exposure amount	Risk weighted assets (RWA)
1	**Total portfolios subject to the CVA advanced method**	-	-
2	i) VaR component (including the 3x multiplier)		-
3	ii) Stressed VaR component (including the 3× multiplier)		-
4	**Total portfolios subject to the CVA standardized method**	173,544	106,114
EU4	**Total based on original exposure method**	-	-
5	**Total subject to the CVA capital charge**	173,544	106,114

Table 32 (CCR3): Standardized approach – CCR exposures by regulatory portfolio and risk weighting

	(in € thousands)	Weighting											Total	Of which not rated
		0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Other		
1	Governments and central banks	52,366	-	-	-	-	-	-	-	-	-	-	52,366	
2	Regional governments and local authorities	-	-	-	-	106,944	-	-	-	-	-	-	106,944	
3	Public sector (public bodies excluding central governments)	-	-	-	-	1,049	-	-	-	-	-	-	1,049	
4	Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	0	
5	International organizations	-	-	-	-	-	-	-	-	-	-	-	0	
6	Credit institutions	-	295,806	-	-	-	473	-	-	-	-	-	296,279	
7	Corporates	-	-	-	-	-	-	-	-	-	-	-	0	
8	Retail customers	-	-	-	-	-	-	-	-	-	-	-	0	
9	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	0	
10	Other assets	-	-	-	-	-	-	-	-	-	-	-	0	
11	**Total**	**52,366**	**295,806**	-	-	**107,993**	**473**	-	-	-	-	-	**456,638**	-

Table 33 (CCR4): Internal ratings-based approach - Counterparty credit risk exposures by portfolio and PD scale

(in € thousands)	PD scale	EAD post-CRM	Average PD	Average LGD	Average maturity	Risk weighted assets (RWA)	Weighting
Credit institutions							
	0.00 to < 0.15	199,879	0.07%	43.90%	2.5	44,545	22.3%
	0.15 to < 0.25	15,013	0.23%	27.77%	2.5	6,199	41.3%
	0.25 to < 0.50	227	0.44%	52.50%	2.5	242	106.5%
	0.50 to < 0.75	-	-	-	-	-	-
	0.75 to < 2.50	-	-	-	-	-	-
	2.50 to < 10.00	-	-	-	-	-	-
	10.00 to < 100.00	-	-	-	-	-	-
	100.00 (default)	-	-	-	-	-	-
	Subtotal	215,119	0.07%	43.71%	2.5	50,986	23.7%
Corporates							
	0.00 to < 0.15	33,198	0.07%	39.89%	2.5	6,850	21%
	0.15 to < 0.25	-	-	-	-	-	-
	0.25 to < 0.50	42,546	0.35%	48.41%	2.5	28,388	67%
	0.50 to < 0.75	42,291	0.55%	45.00%	2.5	32,518	77%
	0.75 to < 2.50	93,955	1.33%	43.47%	2.5	91,206	97%
	2.50 to < 10.00	10,129	3.93%	45.83%	2.5	15,073	149%
	10.00 to < 100.00	1,365	18.73%	45.00%	2.5	3,077	225%
	100.00 (default)	1,109	100.00%	73.82%	2.5	0	0%
	Subtotal	224,593	1.52%	44.43%	2.5	177,112	78.9%
Of which: SMEs							
	0.00 to < 0.15	-	-	-	-	-	-
	0.15 to < 0.25	-	-	-	-	-	-
	0.25 to < 0.50	3,440	0.30%	45.00%	2.5	1,927	56%
	0.50 to < 0.75	31,500	0.56%	45.00%	2.5	24,276	77%
	0.75 to < 2.50	40,588	1.45%	45.00%	2.5	39,926	98%
	2.50 to < 10.00	5,671	4.02%	45.00%	2.5	8,330	147%
	10.00 to < 100.00	521	14.51%	45.00%	2.5	969	186%
	100.00 (default)	780	100.00%	75.00%	2.5	0.0	0%
	Subtotal	82,500	2.25%	45.28%	2.5	75,427	91.4%
Retail customers							
	0.00 to < 0.15	30	0.04%	45.00%	-	2	6%
	0.15 to < 0.25	39	0.18%	45.00%	-	7	18%
	0.25 to < 0.50	23	0.43%	45.00%	-	6	27%
	0.50 to < 0.75	17	0.53%	45.00%	-	6	35%
	0.75 to < 2.50	773	1.26%	45.00%	-	395	51%
	2.50 to < 10.00	13,480	6.17%	45.00%	-	7,409	55%
	10.00 to < 100.00	58	10.49%	45.00%	-	48	81%
	100.00 (default)	-	-	-	-	-	-
	Subtotal	14,420	5.88%	45.00%	-	7,873	54.6%
Of which: Other - retail customers							
	0.00 to < 0.15	30	0.04%	45.00%	-	2	6%
	0.15 to < 0.25	39	0.18%	45.00%	-	7	18%
	0.25 to < 0.50	23	0.43%	45.00%	-	6	27%
	0.50 to < 0.75	17	0.53%	45.00%	-	6	0%
	0.75 to < 2.50	773	1.26%	45.00%	-	395	51%
	2.50 to < 10.00	13,480	6.17%	45.00%	-	7,409	55%
	10.00 to < 100.00	58	10.49%	45.00%	-	48	81%
	100.00 (default)	-	-	-	-	-	-
	Subtotal	14,420	5.88%	45.00%	-	7,873	54.6%

Of which: SMEs							
	0.00 to < 0.15	-	-	-	-	-	-
	0.15 to < 0.25	-	-	-	-	-	-
	0.25 to < 0.50	13	0.47%	45.00%	-	3	25%
	0.50 to < 0.75	-	-	-	-	-	-
	0.75 to < 2.50	114	1.13%	45.00%	-	44	39%
	2.50 to < 10.00	13,426	6.18%	45.00%	-	7,372	55%
	10.00 to < 100.00	-	-	-	-	-	-
	100.00 (default)	-	-	-	-	-	-
	Subtotal	13,554	6.1%	45.00%	-	7,419	54.7%
Of which: Non-SMEs							
	0.00 to < 0.15	30	0.04%	45.00%	-	2	6%
	0.15 to < 0.25	39	0.18%	45.00%	-	7	18%
	0.25 to < 0.50	10	0.37%	45.00%	-	3	29%
	0.50 to < 0.75	17	0.53%	45.00%	-	6	35%
	0.75 to < 2.50	658	1.29%	45.00%	-	350	53%
	2.50 to < 10.00	54	4.28%	45.00%	-	38	69%
	10.00 to < 100.00	58	10.49%	45.00%	-	48	81%
	100.00 (default)	-	-	-	-	-	-
	Subtotal	867	2.0%	45.00%	-	453	52.3%
Total		**454,132**	**0.35%**	**43.83%**	**2.5**	**235,971**	**52.0%**

Table 34 (CCR6): Credit derivative exposures

Not applicable to Crédit Mutuel Arkéa due to the absence of credit derivatives.

(in € thousands)	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
Notionals			
Single-name credit default swaps	-	-	-
Index credit default swaps	-	-	-
Total return swaps	-	-	-
Credit options	-	-	-
Other credit derivatives	-	-	-
Total notionals	-	-	-
Fair values			
Positive fair value (asset)	-	-	-
Negative fair value (liability)	-	-	-

Table 35 (CCR7): Risk-weighted asset (RWA) flow statement of counterparty credit risk exposures under the internal model method

Not applicable to Crédit Mutuel Arkéa as the internal model method is not used to calculate the exposure value.

(in € thousands)	**Risk weighted assets (RWA)**	**Capital requirements**
12.31.2017	**-**	**-**
Amount of assets	-	-
Asset quality	-	-
Updating of templates	-	-
Methodology and policy	-	-
Acquisitions and disposals	-	-
Currency movements	-	-
Other	-	-
12.31.2018	**-**	**-**

Table 36 (CCR8): Central counterparty exposure

(in € thousands)	EAD post-CRM	Risk weighted assets (RWA)
Exposures to QCCPs (total)	**295,806**	**5,916**
Exposures for trades with QCCPs (excluding initial margin and default fund contributions); of which	228,418	4,568
(i) OTC derivatives	228,418	4,568
(ii) Listed derivatives		
(iii) SFTs		
(iv) Netting sets where cross-product netting has been approved		
Segregated initial margin	67,388	1,348
Non-segregated initial margin		
Pre-funded default fund contributions		
Alternative calculation of own fund requirements for exposures		
Exposures to non-QCCPs (total)		

VIII. Credit risk mitigation techniques

Financial, personal and real collateral can be used directly to reduce the calculation of credit risk-related capital requirements that help to determine the calculation of the group solvency ratio. The use of collateral in risk mitigation techniques is, however, subject to compliance with eligibility conditions and minimum requirements imposed by regulations.

Netting and collateralization of repurchase agreements and over-the-counter derivatives

When a master agreement is entered into with a counterparty, the signatory entity applies netting to the exposure on the counterparty.

With counterparties that are credit institutions, Crédit Mutuel Arkéa supplements those agreements with collateralization agreements (CSAs). The operational management of these agreements takes place through the TriOptima platform.

Through regular margin calls, the residual net credit risk from over-the-counter derivatives and repurchase agreements is greatly reduced.

Description of the main categories of collateral taken into account by the institution

Collateral is used in the calculation of weighted risks in different ways depending on the type of borrower, the calculation method used for the exposure hedged and the type of collateral.

For agreements involving mass-market customers (the "retail" portfolio and, in part, the "corporate" portfolio) that are handled using the Advanced Internal Ratings-Based Approach (IRBA), collateral is taken into account in the calculation and segmentation of the loss given default (LGD) calculated statistically for all of the group’s non-performing loans and loans in litigation.
For agreements pertaining to the “Institutions” portfolio and, in part, the “Corporate” portfolio, personal collateral and financial collateral are used as risk mitigation techniques as defined by regulations:

- personal collateral corresponds to the undertaking made by a third party to replace the primary debtor in the event of default by the latter;
- financial collateral is defined as a right of the institution to liquidate, retain or obtain the transfer or ownership of certain amounts or assets such as pledged cash deposits, debt securities, shares or convertible bonds, gold, UCITS shares, life insurance policies and instruments of any kind issued by a third party and repayable on demand.

Procedures applied for the valuation and management of instruments that constitute real collateral

The procedures for measuring collateral vary according to the nature of the instrument that constitutes the security interest. Generally, the studies carried out are based on statistical estimate methodologies that are directly integrated into the tools and based on external indexes to which discounts can be applied depending on the type of asset used as collateral. In the case of real estate collateral, the initial valuation is usually calculated based on the acquisition or construction value of the asset.

During the lifetime of the collateral, it is revalued periodically according to the rules described in the procedures.

Main categories of protection providers

Apart from intra-group collateral, the main categories of protection providers taken into account are mutual collateral companies such as Crédit Logement, CNP or GPA.

Table 37 (CR3): Credit risk mitigation (CRM) techniques – Overview

(in € thousands)	Exposures unsecured - carrying amount	Exposures secured - carrying amount (*)	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total loans	43,246,633	36,024,036	32,687,293	3,336,743	0
Total debt securities	10,974,580	0	0	0	0
Total exposures	54,221,213	36,024,036	32,687,293	3,336,743	0
Of which in default	246,420	418,854	399,689	19,165	0

**Column containing secured exposures, whether or not the collateral concerned is eligible for credit risk mitigation techniques in the regulatory sense to reduce capital requirements.*

Crédit Mutuel Arkéa applies the advanced internal ratings-based method to most of its customer loans. As a result, collateral is mainly taken into account in the calculation of loss given default.

Table 38 (CR4): Standardized approach – Credit risk exposure and credit risk mitigation (CRM) effects

(in € thousands)	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
Exposure class	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWAs	RWA density
Central governments (sovereign borrowers) and central banks	7,620,328	50,005	7,620,328	50,005	223,422	3%
Regional governments and local authorities	4,383,503	1,480,198	4,383,503	1,480,198	984,587	20%
Public sector (public bodies excluding central governments)	7,394,216	247,892	7,394,216	247,892	0	0%
Multilateral development banks	60,689	0	60,689	0	0	0%
International organizations	256,288	0	256,288	0	0	0%
Banks	358,390	0	358,390	0	163,925	25%
Corporates	642,457	58,940	642,457	58,940	612,098	92%
Retail customers	2,508,878	301,444	2,508,878	301,444	1,918,695	73%
Exposures secured by a mortgage on immovable property	2,968,797	215,777	2,968,797	215,777	1,212,716	42%
Exposures in default	387,083	1,750	387,083	1,750	230,990	104%
Exposures associated with particularly high risk	-	-	-	-	-	-
Covered bonds	28,774	0	28,774	0	2,877	10%
Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Exposures in the form of units or shares in undertakings for collective investment (UCIs)	9,182	1,259,630	9,182	1,259,630	148,104	57%
Exposures in the form of equities	13,586	0	13,586	0	31,181	230%
Other assets	643,643	0	643,643	0	643,643	100%
Total	**27,275,816**	**3,615,635**	**27,275,816**	**3,615,635**	**6,172,240**	**22%**

Outstandings measured using the standardized approach mainly concern:

- the categories comprising central and local governments and similar entities,
- mortgage lending by specialized subsidiaries.

This type of counterparty or lending benefits from preferential weighting from the outset. There is no additional impact from the use of risk mitigation (CRM) techniques.

Moreover, Crédit Mutuel Arkéa does not use credit derivatives as a credit risk mitigation technique (no impact on RWA).

Table 39 (CCR5-A): Impact of netting and collateral held on exposure values

	(in € thousands)	Gross positive fair value or net carrying amount	Netting benefits	**Netted current credit exposure**	Collateral held	**Net credit exposure**
1	Derivatives	1,485,385	1,232,613	**252,772**	-	**252,772**
2	Repurchase agreements	1,099,557	1,041,958	57,599	-	**57,599**
3	Cross-product netting			-		-
4	**Total**	**2,584,942**	**2,274,570**	**310,372**	-	**310,372**

Table 40 (CCR5-B): Composition of collateral for exposures to counterparty credit risk

	Collateral used in derivative contracts				Collateral used for securities	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
(in € thousands)	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	262,050		355,647			
Government bonds					47,571	
Covered bonds					994,387	
Total	**262,050**	**0**	**355,647**	**0**	**1,041,958**	**0**

IX. Securitization

Objectives

Securitization positions recorded on Crédit Mutuel Arkéa’s balance sheet relate exclusively to investment activity. Transactions concern only senior tranches that still have an external rating and are fully accounted for in the banking book.
Crédit Mutuel Arkéa's exposure to securitizations is gradually decreasing. The size of the portfolio relating to these investments is immaterial. It is in fact being managed on a run-off basis.

Monitoring and control procedures for capital markets activities

Market risks from these investments are monitored and controlled by means of the risk control procedures specific to the capital markets activities. In particular, they are monitored in terms of market risk and counterparty risk.

Credit risk hedging policies

The portfolio in respect of these investments has not been hedged against credit risk, through the purchase of protection such as credit default swaps.

Prudential approaches and methods

Securitization transactions are exclusively processed using an approach based on external valuations.

Accounting principles and methods

Securitization instruments are recognized in the same way as other debt securities, i.e. based on their accounting classification. A security is classified:

- at amortized cost, if it is held with a view to collecting the contractual cash flows, and if its characteristics are similar to those of a so-called basic contract,
- at fair value through other comprehensive income, if the instrument is held with a view to collecting contractual cash flows and selling it when the opportunity arises, without however holding it for trading, and if its characteristics are similar to those of a so-called basic contract implicitly entailing a high predictability of the related cash flows (“hold to collect and sell” model),
- at fair value through profit or loss, if:
  - it is not eligible for the two aforementioned categories (as it does not meet the “basic” criterion and/or is managed in accordance with the “other” business model), or
  - the group opts to classify it as such upon initial recognition and irrevocably. This option is used to reduce inconsistency of accounting treatments with regard to another associated instrument.

The detailed accounting principles and methods are presented in the Crédit Mutuel Arkéa registration document, in the section entitled “Notes to the consolidated financial statements”.

Table 41: Securitization by type

(in € thousands)	12.31.2018	12.31.2017
Securitization	**0**	**27,835**
Traditional securitization		26,401
Synthetic securitization		1,434

Table 42: Breakdown of outstandings by credit quality step

(in € thousands) Credit quality steps	12.31.2018	12.31.2017
E1		1,700
E2		9,467
E3		0
E4		448
E5		7,900
E6		0
E7		0
E8		1,589
E9		5,132
E10		0
E11		0
Positions weighted at 1.250%		1,600
Total value exposed to risk	**0**	**27,835**

Table 43: Capital requirements

(in € thousands)	12.31.2018	12.31.2017
Capital requirements	**0**	**3,245**

X. Market risk

This information is provided in Crédit Mutuel Arkéa's registration document, in the section entitled "Risk factors".

Crédit Mutuel Arkéa calculates its market risk capital requirements using the standardized approach.

Table 44 (MR1): Market risk under the standardized approach

	(in € thousands)	RWA	Capital requirements
	Outright products		
1	Interest rate risk (general and specific)	-	-
2	Equity risk (general and specific)	-	-
3	Foreign exchange risk	-	-
4	Commodity risk	-	-
	Options		
5	Simplified approach	-	-
6	Delta-plus method	-	-
7	Scenario approach	-	-
8	Securitization (specific risk)		-
9	**Total**	**-**	**-**

XI. Banking book interest rate risk

This information is provided in Crédit Mutuel Arkéa's registration document, in the section entitled "Risk factors".

XII. Operational risk

Information on the structure and organization of the function responsible for operational risk management is provided in Crédit Mutuel Arkéa’s registration document, in the section entitled “Risk factors”.

Description of the advanced measurement approach (AMA)

A dedicated, independent function, managed at CNCM level, is responsible for implementing the advanced measurement approach (AMA) for assessing capital requirements in respect of operational risks. Crédit Mutuel Arkéa is fully committed to this approach.

It involves measuring and controlling operational risks based on the risk mapping carried out for each business line, purpose and type of risk. This work is carried out in close collaboration with the functional and operational departments, in accordance with the day-to-day risk management measures. These mappings serve as a standardized framework for analysis of the loss experience. They result in modeling drawn from the work of experts which is reconciled with probability-based estimates based on different scenarios.

For modeling purposes, the organization relies mainly on the national database of internal incidents. Data is entered into this application by Crédit Mutuel Arkéa in accordance with a national collection procedure which defines a uniform threshold of €1,000 above which each incident must be input. To ensure data collection is exhaustive, the national system also provides a framework for reconciliations of the incident database and the accounting information.

In addition, the group subscribes to an external database that makes it possible to enhance and diversify the data input into the operational risk measurement and analysis system. Use of this database and the procedures for taking this data into account are the subject of a CNCM procedure.
Crédit Mutuel Arkéa's general management and reporting system incorporates the requirements of the administrative order of November 3, 2014 relating to internal control. The executive body is informed of operational risk exposures and losses on a regular basis and at least four times a year.

Authorized use of the AMA method

The ACPR has authorized Crédit Mutuel to use the advanced measurement approach (AMA) to calculate its capital adequacy requirement as from April 1, 2010 for the scope of the group authorized as of that date. This provision applies to Crédit Mutuel Arkéa, except for those entities that have been included in the calculation scope since that date.

Crédit Mutuel Arkéa's capital adequacy requirement calculated using the AMA method is determined by dividing between the regional groups the requirement calculated at the level of the Confédération Nationale du Crédit Mutuel.

Operational risk mitigation and hedging policy

Operational risk mitigation techniques include:

- preventive measures identified during the mapping process and implemented directly by operational staff;
- insurance programs;
- safeguard initiatives, which focus primarily on the widespread implementation of Emergency and Business Continuity Plans (EBCP).

Each of Crédit Mutuel Arkéa's key or important activities has its own emergency and business continuity plan, which is organized on the basis of three phases:

- emergency assistance: this is triggered immediately and involves measures designed to handle emergencies and institute solutions for operating under adverse conditions;
- business continuity: this involves resuming activities under adverse conditions in accordance with procedures defined before the crisis;
- return to normal.

Use of insurance techniques

The ACPR has authorized Crédit Mutuel to take into account the deduction of insurance as a factor for reducing capital requirements in respect of operational risk under the advanced measurement approach with effect from June 30, 2012.

The principles applied for financing operational risks within Crédit Mutuel depend on the frequency and severity of each potential risk. They consist of:

- insuring or setting aside funds for non-serious frequent risks (expected losses) through the operating account;
- insuring serious and major insurable risks;
- developing self-insurance for amounts below insurance companies' excesses;
- allocating prudential capital reserves or provisions financed by assets that can be mobilized for serious non-insurable risks.

The Arkéa group's insurance programs comply with the provisions of Article 323 of European Regulation 575/2013 (CRR) concerning the deduction of insurance under the advanced measurement approach (AMA).

The insurance coverage used in the deduction process covers damage to real and personal property (multi-risk), specific banking risks and fraud, professional third-party liability and cyber-risks.

XIII. Liquidity risk

This section supplements the information provided in Crédit Mutuel Arkéa's registration document, in the section entitled "Risk factors".

Strategy and processes implemented

The main objective of the Arkéa group's treasury and refinancing management strategy is to ensure that liquidity risk management complies with the group's ALM policy. This policy, defined by Crédit Mutuel Arkéa's General Management and Board of Directors, has historically been vigilant and prudent in the face of this risk.

The general liquidity risk appetite is defined using the principles approved by Crédit Mutuel Arkéa's Board of Directors, which are summarized below:

- to manage liquidity within the group's consolidated banking scope,
- to ensure prudent management of liquidity risk by dedicated Crédit Mutuel Arkéa teams that act as the group's central liquidity unit (the central liquidity unit being the group's only issuer in the markets),
- to manage the Arkéa group's balance sheet structure in order to help control liquidity risk,
- to manage the internal allocation to provide subsidiaries with access to liquidity at all times (Crédit Mutuel Arkéa being their sole counterparty for managing their cash needs or surpluses) to enable them to comply with regulatory and internal rules.

These principles are broken down into management limits and thresholds applicable to a series of indicators that are regularly monitored (which incorporate different assumptions taking into account the group's business model).
The following indicators are the subject of particular attention: the loan-to-deposit ratio, the LCR ratio, the survival horizon (with a stress scenario in the financial markets) and the level of use of the declared 3G pool (allowing access to the European Central Bank's monetary policy operations).

Since 2010, the group has implemented a policy aimed at reducing its level of dependence on the financial markets and increasing its reserves of liquid assets. The loan-to-deposit ratio has decreased by almost 50 points and now stands at nearly 100%. The liquidity reserves (made up of available cash, securities that are LCR-eligible and assets that are ECB-eligible immediately or in the short term) represent twice the requirements in connection with the LCR.

The monitoring and management system is supplemented by other indicators that cover the various aspects of liquidity risk: gaps in the central and stress scenarios, the NSFR ratio (Net Stable Funding Ratio – see below), asset mobilization ratio (based on the reporting of encumbered assets), liquidity reserves, dispersion of sources of refinancing, refinancing volumes by maturity, etc.

At the end of 2018, the management limits and thresholds set by the management body (General Management and the Board of Directors) were complied with in full.

Table 45 (LIQ1): Liquidity coverage ratio (LCR)

Under European regulation 575/2013, Crédit Mutuel Arkéa produces, and submits monthly to the European Central Bank, a report on its LCR (liquidity coverage ratio).

The purpose of the LCR is to ensure the short-term resilience of banks in the face of severe liquidity stress. It verifies that the level of highly-liquid assets is sufficient to cover the net cash flows over the next 30 days, under stress assumptions involving, in particular, deposit flight and the drawing down of amounts under off-balance sheet agreements.

The minimum level required for the LCR was set at 100% in 2018. The group met the regulatory requirement throughout 2018 with significant room for maneuver. At the end of 2018, the group's consolidated LCR was 130%. The average annual level for 2018 was 132% as shown in the table below.

In addition to the LCR, European regulations provide for a long-term structural liquidity ratio called the NSFR (net stable funding ratio). The NSFR is designed to encourage credit institutions to have a permanent structure of stable resources, enabling them to continue operating over a period of one year in an environment of prolonged stress. The required minimum level is 100%.
At end-2018, this ratio was in the process of being applied at European Union level, with a regulatory requirement expected from 2019. Simulations performed at the end of 2018 show a ratio of more than 105%.

(in € thousands)		Unweighted total value				Weighted total value			
Quarter ending on (December 31, 2018)									
Number of dates used to calculate averages: 12		03.31.2018	06.30.2018	09.30.2018	12.31.2018	03.31.2018	06.30.2018	09.30.2018	12.31.2018
HIGH QUALITY ASSETS									
1	Total high quality liquid assets (HQLA)					**8,812**	**8,826**	**9,052**	**9,189**
CASH OUTFLOW									
2	Retail deposits and deposits from small business customers, of which:	32,487,049	32,899,677	33,356,367	33,815,635	2,399,856	2,419,159	2,444,550	2,476,134
3	Stable deposits	19,124,618	19,576,754	20,044,255	20,437,041	956,231	978,838	1,002,213	1,021,852
4	Less stable deposits	13,344,988	13,307,378	13,296,484	13,361,285	1,426,181	1,424,777	1,426,709	1,436,973
5	Unsecured wholesale funding	13,204,156	13,099,114	13,181,971	13,325,584	6,697,368	6,584,343	6,624,545	6,625,073
6	Operational deposits (all counterparties) and deposits in cooperative bank networks	0	0	0	0	0	0	0	0
7	Non-operational deposits (all counterparties)	12,555,083	12,689,677	12,787,032	12,951,078	6,048,295	6,174,907	6,229,606	6,250,567
8	Unsecured receivables	649,073	409,436	394,939	374,506	649,073	409,436	394,939	374,506
9	Secured wholesale funding					47,745	49,386	28,914	27,543
10	Additional requirements	8,819,455	8,796,466	8,873,317	9,007,734	1,180,538	1,172,473	1,145,147	1,145,329
11	Outflows associated with derivatives exposures and other collateral requirements	94,804	95,605	87,434	82,956	94,804	95,605	87,434	82,956
12	Outflows associated with financing losses on debt products	0	0	0	0	0	0	0	0
13	Credit and cash facilities	8,724,651	8,700,861	8,785,883	8,924,777	1,085,734	1,076,868	1,057,713	1,062,372
14	Other contractual funding obligations	364,489	350,307	282,058	236,668	351,858	340,424	273,366	229,274
15	Other contingent funding obligations	0	0	0	0	0	0	0	0
16	**TOTAL CASH OUTFLOWS**					**10,677,367**	**10,565,786**	**10,516,522**	**10,503,353**
CASH INFLOWS									
17	Secured lending (e.g. reverse repurchase agreements)	151,883	250,224	227,964	230,873	5,077	11,767	29,233	29,233
18	Inflows from fully performing exposures	1,875,817	1,877,129	1,983,787	2,142,487	1,443,836	1,444,696	1,531,965	1,674,832
19	Other cash inflows	1,519,219	1,534,156	1,673,175	1,771,841	1,519,219	1,534,156	1,673,175	1,771,841
EU-19a	(Difference between total weighted cash inflows and total weighted cash outflows from transactions in third countries where transfer restrictions apply, or denominated in non-convertible currencies)					0	0	0	0
EU-19b	(Excess cash inflows from a related specialized credit institution)					0	0	0	0
20	**TOTAL CASH INFLOWS**	**3,546,919**	**3,661,509**	**3,884,925**	**4,145,201**	**2,968,132**	**2,990,619**	**3,234,373**	**3,475,906**
EU-20a	Fully exempt cash inflows								
EU-20b	Cash inflows subject to 90% cap								
EU-20c	Cash inflows subject to 75% cap	3,546,919	3,661,509	3,884,925	4,145,201	2,968,132	2,990,619	3,234,373	3,475,906
21	**LIQUIDITY BUFFER**					8,812,217	8,826,241	9,051,514	9,189,022
22	**TOTAL NET CASH OUTFLOWS**					7,709,235	7,575,166	7,282,149	7,027,446
23	**LIQUIDITY COVERAGE RATIO (%)**					**115%**	**117%**	**125%**	**132%**

Structure and organization of the function responsible for liquidity risk management

Three levels of management bodies are responsible for liquidity management.

Group-wide ALM principles and limits are set annually by Crédit Mutuel Arkéa's Board of Directors. The Board is regularly informed of the results of the policy implemented and monitors compliance with the limits on a quarterly basis. The subsidiaries' limits are adopted by their respective supervisory bodies in accordance with the framework defined at group level.

The ALM and Capital Management Committee is responsible for the group's strategic management. Chaired by the group's Chief Executive Officer, its members include the effective managers and the central managers in collaboration with asset-liability management. This committee, which constitutes an "ad hoc committee" within the meaning of Article 228 of the November 3, 2014 administrative order on internal control, meets at least four times a year.
As regards liquidity, the role of the ALM and Capital Management Committee is to:

- define the general liquidity risk management policy and propose to Crédit Mutuel Arkéa's Board of Directors a body of principles and limits,
- monitor the liquidity exposure of the group and of its components. If necessary, it may ask a unit to adjust its exposure,
- validate the process for measuring and monitoring related risks,
- steer the entities' commercial policies on savings collection and loan sales by setting the internal capital transfer rules.

The Operational ALM committees of the group and the subsidiaries are responsible for the day-to-day ALM of the corresponding entity, by delegation of authority and based on guidelines defined by the group ALM and Capital Management Committee. The group's Operational ALM Committee meets monthly. Chaired by the deputy headirector of the Development Support division, its role is to:

- monitor cash and liquidity reserves,
- manage the group's refinancing and liquidity hedges, in particular by defining the program for raising funds on the markets for all maturities,
- monitor risk indicators and compliance with management limits and rules.

The main operational structures are:

- the group ALM department, which reports to the Financial Steering department, produces the analyses and reports required for the supervision and decisions of the ALM and Capital Management Committee and of the Group Operational ALM Committee (the department head being a member of these committees), in collaboration, if necessary, with the Financial Markets department. It monitors the implementation of the decisions of the two aforementioned committees. It also manages the group's main loan assignment channels,
- the Financial Markets department, which negotiates and arranges transactions (refinancing, investment and treasury) within the framework determined by the ALM and Capital Management Committee and the Group Operational ALM Committee,
- the Back Office department, which manages intra-day cash, in conjunction with the Financial Markets department.

Policies for hedging and mitigating liquidity risk, and strategies and processes put in place to monitor the ongoing effectiveness of such hedges and mitigation techniques

Liquidity risk exposure monitoring consists of a range of indicators covering the various facets of liquidity risk. A body of internal standards is also defined and validated annually, and is monitored regularly (at least once every quarter); if necessary, if a standard appears inappropriate in the light of cyclical or structural changes, it may be amended by a decision or proposal of the ALM and Capital Management Committee and the Board of Directors.

The group's market refinancing program is defined annually by taking into account the impact of the projected commercial activity on the main indicators and in accordance with the group system of multi-year projections with which it is in line. It aims to ensure lasting compliance with internal standards. It can be updated every quarter based on actual and projected trends in commercial activity and the financial market environment (see pages 204 and 205 of the registration document for more details).

Scope and nature of liquidity risk reporting and assessment systems, and statement by the management body

The monitoring of exposure and limits is the subject of regular (generally quarterly) reports to the above-mentioned bodies, as well as to the Risk and Internal Control Committee and the Risk Monitoring Committee. The reports are tailored to the recipients concerned on the basis of their role in the management and monitoring of liquidity risk.

In addition, each year, the management body (made up of Crédit Mutuel Arkéa's Board of Directors and General Management) approves a statement on liquidity risk. This statement, which is sent to the European Central Bank, covers the main aspects of liquidity risk management: organization, the measurement and monitoring system, the group's appetite, management procedures (both in normal and stress situations), the levels of the main indicators, etc. The statement in respect of 2018 ended as follows:

"Crédit Mutuel Arkéa's Board of Directors and Executive Committee confirm that the group's liquidity situation matches its level of liquidity risk appetite. It reflects the implementation of a prudent policy, both in normal and stress situations.

The centralized structure of liquidity management and the associated governance are appropriate given the vital importance of liquidity risk.

The management system is documented. It covers the various aspects of liquidity risk and is tailored to the Arkéa group's risk profile. Regular reporting by the group's various bodies is in line with expectations.

Regulatory ratios and internal indicators are continuously monitored. Their level demonstrates the group's sound and prudent management.

In accordance with its principles of good management and the expectations of the ECB, Crédit Mutuel Arkéa's Board of Directors and Executive Committee are committed to promoting the ILAAP approach by continuing to monitor on an ongoing basis the adequacy of the group's liquidity and financing in light of its risk appetite level. "

Qualitative short-term liquidity ratio information template

- **Concentration of funding and liquidity sources**

Crédit Mutuel Arkéa seeks to diversify its sources of funding and liquidity. It has therefore defined internal standards on:

- the loan-to-deposit ratio in order to check the balancing of the business,
- the level of dispersion of interbank refinancing in order to ensure control of its dependence on certain counterparties,
- refinancing volumes by maturity to avoid a concentration of the maturities of the refinancing lines.

At the same time, Crédit Mutuel Arkéa has developed a policy of diversifying its refinancing channels and has several types of issue vehicles, particularly in the medium to long term with unsecured and secured issuance programs (see pages 243 and 244 of the registration document).

The definition of the refinancing program takes into account these limits and the various possible issuance vehicles. When preparing for and carrying out issues in the markets, attention is also paid to the diversification of investors, both by type of investor (asset managers, banks, etc.) and by geographic area (France, Germany, Scandinavian countries, etc.).

- **Exposure to derivatives and possible collateral calls**

Crédit Mutuel Arkéa uses derivatives mainly for the purpose of managing interest rate risk. They are subject to margin calls that are generally standardized (and are within the framework of the EMIR Directive).

At the end of 2018, the net position of collateral calls was not material and had a marginal impact on cash and liquid securities management.

In addition, the calculation of the LCR includes an additional cash outflow corresponding to additional collateral requirements that would result from an adverse market scenario; the amount is valued at close to €100 million as indicated in item 11 of the above table, which is not material in view of the amount of liquid assets.

- **Asymmetry of currencies in the LCR**

The LCR is calculated in euros only, as foreign currency positions are marginal (below the 5% representativeness threshold in the total consolidated banking balance sheet). This is due to the group's business model and geographic location.

- **Description of the degree of centralization of liquidity management and interaction between group units**

As indicated in the "Strategy and processes implemented" section, Crédit Mutuel Arkéa acts as a central liquidity unit:

- Crédit Mutuel Arkéa borrows and lends on the markets while taking into account the projected needs or surpluses of the entities included in the banking scope. Transactions are carried out in euros,
- entities with cash requirements are refinanced exclusively by Crédit Mutuel Arkéa; banking entities with cash surpluses reinvest them exclusively with Crédit Mutuel Arkéa. Transactions are carried out at arm's length.

In addition to the vital importance of liquidity risk management by specialized Crédit Mutuel Arkéa teams, this structure makes it possible to pool the needs of all banking entities and to achieve the critical mass needed to access markets under competitive conditions as regards prices and volumes.

Since the group's liquidity management is centralized within Crédit Mutuel Arkéa, the supervisor has granted the group's main banking subsidiaries an exemption from the individual monitoring of the LCR.

XIV. Information on encumbered and unencumbered assets

Pursuant to Article 100 of the CRR, Crédit Mutuel Arkéa reports to the competent authorities the amount of encumbered and unencumbered assets at its disposal and their main characteristics. These assets may be used as collateral to obtain other financing on the secondary markets or from the central bank, and therefore constitute additional sources of liquidity.

An asset is considered to be "encumbered" if it is used as collateral, or may be used contractually, to secure, collateralize or enhance a transaction from which it cannot be separated. By contrast, an asset is "unencumbered" if it is free from any legal, regulatory, contractual or other limitations, the possibility of liquidation, sale, transmission or disposal.

For example, the definition of encumbered assets includes the following types of contracts:

- secured financial transactions, including repurchase agreements, securities lending and other forms of loans,
- collateralization agreements,
- collateralized financial guarantees,
- collateral placed in clearing systems, clearing houses or other institutions as a condition for accessing the service. This includes initial margins and funds against insolvency risk,
- facilities given to central banks. Assets already in position should not be considered encumbered, unless the central bank does not authorize the withdrawal of these assets without prior agreement,
- underlying assets of securitization entities when these assets have not been derecognized by the entity. The assets underlying the securities held are not considered encumbered, unless these securities are used to pledge or guarantee a transaction in any way,
- baskets of collateral created to issue covered bonds. These assets are recognized as encumbered assets except in certain situations where the entity holds these covered bonds (self-issued bonds).

Assets placed in financing mechanisms that are unused and can easily be withdrawn are not considered to be encumbered.

In the case of Crédit Mutuel Arkéa, the main sources of charges on assets are:

- repurchase agreements and securities lending;
- receivables used as collateral for covered bond issuance;
- derivatives via margin calls.

The median ratio of encumbered assets to total assets was 17.6% at December 31, 2018.

Table 46 (A): Encumbered and unencumbered assets

	Carrying amount of encumbered assets	of which HQLA and EHQLA	Fair value of encumbered assets	of which HQLA and EHQLA	Carrying amount of unencumbered assets	of which HQLA and EHQLA	Fair value of unencumbered assets	of which HQLA and EHQLA
(in € thousands)	010	30	040	50	060	80	090	100
Median values of assets	**14,975,133**	**0**			**70,064,629**	**0**		
Median values of equity instruments	0	0	0	0	824,237	0	824,237	0
Median values of debt securities	4,221,164	0	4,221,164	0	7,340,504	0	7,348,234	0
Of which covered bonds	*0*	*0*	*0*	*0*	*1,148,343*	*0*	*1,148,343*	*0*
Of which asset-backed securities	*0*	*0*	*0*	*0*	*3,931*	*0*	*3,931*	*0*
Of which issued by public administrations	*2,067,688*	*0*	*2,067,688*	*0*	*1,874,100*	*0*	*1,874,909*	*0*
Of which issued by financial enterprises	*2,039,676*	*0*	*2,039,676*	*0*	*3,425,739*	*0*	*3,421,558*	*0*
Of which issued by non-financial enterprises	*0*	*0*	*0*	*0*	*1,583,631*	*0*	*1,590,251*	*0*
Median values of other assets	11,683,197	0			61,908,705	0		

Table 47 (B): Collateral received

	Fair value of encumbered collateral received or encumbered own debt securities issued	of which HQLA and EHQLA	Fair value of the collateral received or own debt securities issued available for encumbrance	of which HQLA and EHQLA
(in € thousands)	010	30	040	60
Median values of collateral received by the institution concerned	**0**	**0**	**852,449**	**0**
Median values of equity instruments	0	0	0	0
Median values of debt securities	0	0	581,114	0
Of which covered bonds	0	0	27,014	0
Of which asset-backed securities	0	0	0	0
Of which issued by public administrations	0	0	520,171	0
Of which issued by financial enterprises	0	0	21,276	0
Of which issued by non-financial enterprises	0	0	12,671	0
Other collateral received	0	0	272,280	0
Own debt securities issued, other than own covered bonds or own asset-backed securities	**0**	**0**	**0**	**0**

Table 48 (C): Carrying amount of encumbered assets/collateral received and associated liabilities

	Corresponding liabilities, contingent liabilities or loaned securities	Assets, collateral received and own debt securities issued other than covered bonds and securities backed by encumbered assets
(in € thousands)	010	030
Carrying amount of selected financial liabilities	13,847,329	14,975,133

XV. Corporate governance and remuneration policy

This information is provided in Crédit Mutuel Arkéa’s registration document, in the section entitled “Corporate governance”.

Appendices

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Given that Crédit Mutuel Arkéa is a mutual group and not listed, and in view of the strength and stability of the group's business model, the disclosures required under the eighth section of the CRR will be published only once a year. Moreover, due to its moderate risk appetite, the bank's balance sheet changes slowly and therefore this information need only be disclosed once a year.