

Disclosure Report

of Goldman Sachs Bank Europe SE

(formerly known as Goldman Sachs AG), Frankfurt am Main

for the period ended December 31, 2018 pursuant to Articles 431 to 455 of the Regulation (EU) No 575/2013

Table of Contents

| 1. | Introduction | 3 |
|----------|--|----|
| 2. | Scope | 5 |
| 2. 3. | Goldman Sachs Bank Europe SE | 5 |
| | · | |
| 4. | Risk Management Objectives and Policies | 6 |
| 5. | Risk-bearing Capacity | 7 |
| 6. | Capital Framework | 7 |
| 7. | Capital Requirements | 13 |
| 8. | Counterparty Risk | 14 |
| 9. | Credit Adjustments | 15 |
| 10. | Asset Encumbrance | 17 |
| 11. | Utilisation of External Rating Agencies | 19 |
| 12. | Market Risk | 21 |
| 13. | Operational Risk | 21 |
| 14. | Exposures in Equities not included in the Trading Book | 21 |
| 15. | Exposure to interest rate risk on positions not included in the trading book | 21 |
| 16. | Application of Techniques of Credit Risk Mitigation | 21 |
| 17. | Leverage Ratio | 22 |
| 18. | Liquidity Coverage Ratio (LCR) | 24 |
| 19. | Cautionary Note on Forward-Looking Statements | 25 |

Goldman Sachs

Index of Tables

| Table 1: | Non relevant disclosure requirements | 5 |
|-----------|---|----|
| Table 2: | Reconciliation of balance sheet equity to regulatory components of own funds | 8 |
| Table 3: | Capital instruments' main features (Annex II of Commission Implementing Regulation | |
| | (1423/2013) | 8 |
| Table 4: | Disclosure of own funds (DVO 1423/2013 Annex IV) | 10 |
| Table 5: | Regulatory own funds requirements in accordance with Article 438 (c) and 439 of CRR | 13 |
| Table 6: | Regulatory own funds requirements in accordance with Article 438 (e) of CRR | 14 |
| Table 7: | Regulatory own funds requirements for operational risk in accordance with | |
| | Article 438 (f) of CRR | 14 |
| Table 8: | Regulatory own funds requirements for CVA risk | 14 |
| Table 9: | Regulatory own funds requirements for counterparty risk | 15 |
| Table 10 | : Total amount of exposures accounting offsets and before credit risk mitigation broken | |
| | down by exposure classes and the corresponding average amount of exposures in | |
| | accordance with Article 442 (c) of CRR | 15 |
| Table 11 | : Main geographical areas broken down by exposure classes in accordance with | |
| | Article 442 (d) of CRR | 16 |
| Table 12 | Balance sheet exposures by main sectors and exposure classes in accordance with | |
| | Article 442 (e) of CRR | 16 |
| Table 13 | Exposures by residual maturity and exposure classes in accordance | |
| | with Article 442 (f) of CRR | 17 |
| Table 14 | Book value of encumbered and unencumbered assets in accordance with | |
| | Article 443 CRR | 17 |
| Table 15 | Collateral received for encumbered and unencumbered assets in accordance | |
| | with Article 443 CRR | 18 |
| | Sources of Encumbrance in accordance with Article 443 CRR | 18 |
| | : Appointed rating agencies (ECAIs) | 19 |
| | Receivable amounts before credit risk mitigation by credit quality step | 19 |
| | Receivable amounts after credit risk mitigation by credit quality step | 20 |
| | Credit risk mitigation by risk class | 22 |
| | : Leverage Ratio common disclosure in accordance with Article 451 of CRR | 22 |
| | : Summary reconciliation of accounting assets and exposures under Article 451 of CRR | 23 |
| I able 23 | Breakdown of on-balance sheet exposures (excluding derivatives, SFT and exempted | |
| - | exposures) under Article 451 of CRR | 24 |
| I able 24 | Breakdown of the Liquidity Coverage Ratio according to the LCR Delegated Act | 25 |



1. Introduction

Goldman Sachs Bank Europe SE, Frankfurt am Main (hereinafter referred to as "GSBE" or "the Company") published a disclosure report for the first time on June 30, 2015 in accordance with the regulatory requirements of EU capital adequacy that became effective on January 1, 2014. The requirements and general principles of disclosure are stated in Article 431 et seqq. of Regulation (EU) 575/2013 Capital Requirements Regulation (in the following, "CRR").

The company was known as Goldman Sachs AG (GSAG) until January 15, 2019. On January 15, 2019, GSAG merged with its wholly-owned subsidiary, Goldman Sachs Gestión S.A. (GS Gestión), on a retroactive basis as of January 1, 2018. At the same time, the legal form was changed to a Societas Europaea (SE) and the name to Goldman Sachs Bank Europe SE.

During the fiscal year 2018 GSBE was supervised by the Federal Financial Supervisory Authority (BaFin) and the Deutsche Bundesbank ("German Central Bank").

In the wake of the UK's decision to leave the EU ("Brexit"), the Goldman Sachs Group, Inc. has planned for potential expansion of business in continental Europe. GSBE has played a central role in these plans and has extended its capabilities and market access to enable a broader range of product flows across the member states of the European Union. Consistent with these preparations, limited new activity has commenced in early 2019, but the timing and extent to which additional activity will transfer from other GS entities remains uncertain, and depends on the possible agreement of transitional provisions as part of any Brexit deal.

Additionally, GSBE has applied for and been granted a transitional period of tolerance (while the full application remains in process), to the extent of prior approval by the UK Prudential Regulation Authority, for the use of the Internal Model Method (IMM) for the calculation of exposure values for counterparty credit risk according to CRR Art. 283 as well as for calculating capital requirements under the Internal Model Approach (IMA) for market risk according to CRR Art. 363. GSBE will apply those approaches in the course of 2019.

Furthermore, the shareholders of GSBE injected a total of €300 million of equity into the entity in the form of 300 million new shares issued on February 25, 2019, which has been recognized as regulatory CET1 capital by the BaFin subsequently. In addition, the profit of € 44.1 million for the fiscal year of 2018 has been recognized as CET1 capital after the Annual General Meeting of GSBE took place.

Further information regarding the potential impact on GSBE from Brexit can be found in the published annual financial statements and the management report for the fiscal year 2018.

The annual disclosure report of GSBE is prepared in accordance with Article 433 of CRR and is published on the Goldman Sachs Group website both in English and German https://www.goldmansachs.com/disclosures/gsbank-europe-se-disclosures.html.

Parts of the disclosure requirement are satisfied by information already published in the annual financial statements and in the management report for the financial year 2018, and in accordance with Article 434(2) of CRR, is not restated in the following document.

The annual financial statements as well as the management report for the financial year 2018 are published on the Goldman Sachs Group website <u>https://www.goldmansachs.com/investor-relations/financials/index.html</u>.



The additional information to be disclosed in accordance with Section 26(a) of the German Banking Act (Kreditwesengesetz; in the following, "KWG") was also included in the annual financial statements and the management report for the fiscal year 2018.



2. Scope

The information in this disclosure report refers to GSBE in accordance with Article 436 of CRR.

GSBE is considered the parent company of a group of institutions under § 10a of KWG. Its subsidiary, a financial corporation according to § 1 Abs 3 KWG, is Goldman, Sachs Management GP GmbH, Frankfurt am Main. Under Article 19 of CRR the subsidiary may be exempted from the scope of consolidation so that, in accordance with Article 11 of CRR, there is no requirement for a regulatory consolidation, the rules on disclosure obligations on a consolidated basis under Article 13 do not apply.

Furthermore, the following qualitative and quantitative disclosure requirements are not currently applicable to GSBE, and are thereby not reflected in this disclosure report:

| Article | Content |
|---------|---|
| 441 | Indicators of global system relevance |
| 449 | Risk from securitization positions |
| 450 | Remuneration policy |
| 452 | Application of the IRB approach on credit risks |
| 454 | Use of advanced measurement approaches for operational risk |
| 455 | Use of internal models for market risk measurement |

| Table 1: | Non relevant disclosure requirements |
|----------|--------------------------------------|
|----------|--------------------------------------|

3. Goldman Sachs Bank Europe SE

GSBE is a wholly owned subsidiary of Goldman Sachs Group, Inc. and is fully consolidated in the group financial statements of The Goldman Sachs Group, Inc. based in Wilmington, Delaware, USA. The direct shareholders of GSBE are Goldman, Sachs & Co. Finanz GmbH based in Frankfurt am Main holding 1% and Goldman Sachs (Cayman) Holding Company based in George Town, Cayman Islands holding 99% of the shares.

The Company is managed by its Executive Board under its own responsibility. The Executive Board carries the full responsibility for the management of the Company in accordance with the German Stock Corporation Act. Its members are appointed and dismissed by the Supervisory Board, an independent body.

In the selection of the members of the Executive Board and Supervisory Board, a candidate for each role is considered when, in addition to the actual knowledge, capabilities and experience required by regulations, professional and personal competence of the candidates is also demonstrated. GSBE thereby places the highest requirements on persons who are considered for selection. Female and male candidates are given equal consideration.

GSBE considers diversity to be a priority for promoting the participation of qualified women in leadership positions. As part of the Goldman Sachs Group, GSBE implements the global principles, measures, and goals for diversity at Goldman Sachs. There are no goals or targets to achieve a specified ratio of female members of the Executive Board or Supervisory Board. As at December 31, 2018, female members comprised two thirds of the Supervisory Board.

The Supervisory Board of GSBE has not formed its own risk committee, since the Supervisory Board consists of only three members, and the tasks of a risk committee are performed by the entire Supervisory Board. The Supervisory Board ordinarily meets at least once per calendar quarter.



4. Risk Management Objectives and Policies

Risks are inherent in the firm's businesses and include liquidity, market, credit, operational, model, legal, compliance, regulatory and reputational risks. However, the firm endeavours not to undertake risk in form or amount that could potentially and materially impair our capital and liquidity position or the ability to generate revenues, even in a stressed environment. Where possible the firm employs mitigants and hedges, in order to manage such risks within its risk appetite levels.

Effective risk management plays a key role in the overall success of the firm and of GSBE. Accordingly, the firm has established a robust risk management framework which is designed to enable comprehensive risk management processes through which it monitors, evaluates and manages the risks the company assumes in conducting its activities.

The oversight of risk is ultimately the responsibility of the Executive Board, who oversees risk both directly and through delegation to various committees, councils and other independent control functions within GSBE. The effectiveness of the structural measures on "Internal Governance" that have been introduced is evaluated annually and a corresponding report submitted to the Executive Board and the Supervisory Board. The Executive Board and Supervisory Board have reviewed and approved the report.

The "Principles of Proper Business Organisation and Management", the Risk Handbook, the procedures for determining risk-bearing capacity and the procedures for conducting stress tests are subject to an annual review. The results are reported to the Risk Committee and the Executive Board. The Executive Board approves the results of the review and reports to the Supervisory Board.

The Executive Board has delegated certain tasks relating to the monitoring and daily implementation of risk management to the Risk Committee, the Risk Division and other independent control functions and governing bodies. Delegated tasks include the implementation of risk and liquidity strategies as well as risk management guidelines, an at least annual risk inventory assessment and the development of suggestions and possible implementation of appropriate changes to the risk strategies as well as risk control activities, policies and procedures.

The Risk Committee is responsible for the on-going monitoring and control of all financial risks associated with the activities of each entity. This includes reviewing key financial and risk metrics, including but not limited to profit and loss, capital (including the Internal Capital Adequacy Assessment Process), funding, liquidity, credit risk, market risk, operational risk, model risk, price verification and stress tests. The Credit Risk Council, which is subordinate to the Risk Committee, performs further functions and tasks in the area of credit risk management, including the monitoring and analysis of credit risks as well as the implementation and further development of the strategies and procedures that are employed in credit risk management. In this, the Risk Committee and the Credit Risk Council are obligated to report to the Executive Board appropriately in a timely manner. The Executive Board in turn reports regularly and in a timely manner to the Supervisory Board on matters relevant to risk, especially in the context of Supervisory Board meetings, and also as needed between the regular meetings.

Please refer to further information in the risk report of the management report of GSBE for the financial year 2018.



5. Risk-bearing Capacity

The risk-bearing capacity of GSBE on the basis of the liquidation approach (one year, 99.9%) was maintained on an ongoing basis and the risk utilisation of both the overall risk and individual risks remained will within the limits set by the Executive Board. As of December 31, 2018, risk utilisation was 22% for market risk, 52% for operational risk, 0% for business and earnings risk and 43% for credit risk. The total risk-bearing-capacity utilisation was 40%. Operational as well as credit risk were the main sources of risk.

6. Capital Framework

For CRD IV regulatory purposes, a financial institution's total available capital has the following components:

- Common Equity Tier 1 capital (CET1), which is comprised of common shareholders' equity, after giving effect to deductions for disallowed items and other adjustments;
- Additional Tier 1 capital which is comprised of other qualifying capital instruments; and
- Tier 2 capital, which is comprised of long term qualifying subordinated debt

Certain components of the firm's regulatory capital are subject to regulatory limits and restrictions under CRD IV. In general, to qualify as Tier 1 or Tier 2 capital, an instrument must be fully paid and unsecured. A qualifying Tier 1 or Tier 2 capital instrument must also be subordinated to all senior indebtedness of the organisation.

Under CRD IV, the minimum CET1, Tier 1 capital and Total capital ratios (collectively the Pillar 1 capital requirements) are supplemented by:

- A capital conservation buffer, consisting entirely of capital that qualifies as CET1, which began to phase in on January 1, 2016, and will continue to do so in increments of 0.625% per year until it reaches 2.5% of RWAs on January 1, 2019.
- A countercyclical capital buffer of up to 2.5% (consisting entirely of CET1) in order to counteract excessive credit growth. The buffer only applies to GSBE's exposures to certain types of counterparties and exposures based in jurisdictions which have announced and implemented a countercyclical buffer.
- Individual capital requirement under Pillar 2R (an additional amount to cover risks not adequately captured in Pillar 1). The BaFin performs a periodic supervisory review and evaluation process (SREP) of GSBE, which leads it to a final determination of the individual capital requirement under Pillar 2R. This is a point in time assessment of the minimum amount of capital the BaFin considers that a firm should hold.

The following table contains the full reconciliation from the balance sheet in the audited financial statements to regulatory own funds according to CRR Art. 437 No. 1 (a)



| In millions EUR as of December 31, 2018 | Balance sheet value acc. to financial statements (HGB) | Transition | Own funds (CRR) |
|---|---|------------|--------------------|
| Ordinary share capital | 10.0 | 0.0 | 10.0 |
| (+) Capital surplus | 86.3 | 0.0 | 86.3 |
| (+) other profit reserves | 246.3 | 0.0 | 246.3 |
| (+) Net income | 44.1 | -44.1 | 0.0 |
| = Equity according to financial statement (HGB) | 386.7 | -44.1 | 342.6 |
| = Common Equity Tier 1 capital (CRR) | 386.7 | -44.1 | 342.6 |
| (+) Additional Tier 1 capital (CRR) | 0.0 | 0.0 | 0.0 |
| = Core capital (CRR) | 386.7 | -44.1 | 342.6 |
| (+) Tier 2 capital | 20.0 | 0.0 | 20.0 |
| Of which subordinated debt | 20.0 | 0.0 | 20.0 |
| = Total capital (CRR) | 406.7 | -44.1 | 362.6 |

Table 2: Reconciliation of balance sheet equity to regulatory components of own funds

As of December 31, 2018 the profits for the fiscal year 2018 have not been included in regulatory capital pending completion of the audit and annual general meeting.

Table 3:Capital instruments' main features (Annex II of Commission Implementing Regulation(1423/2013)

| Anne | x II as of December 31, 2018 | Instrument type 1 | Instrument type 2 |
|------|--|-------------------|---|
| 1 | Issuer | GSBE | GSBE |
| 2 | Unique identifier (e.g. CUSIP, ISIN or Bloomberg Identifier for private placement) | Statute | Bilateral Contract |
| 3 | Governing law of the instrument | German Law | German Law |
| | Regulatory treatment | | |
| 4 | Transitional CRR rules | CET1 capital | Tier 2 capital |
| 5 | Post-transitional CRR rules | CET1 capital | Tier 2 capital |
| 6 | Eligible at solo/(sub-)consolidated / solo & (sub-)consolidated | Solo | Solo |
| 7 | Instrument type (types to be specified by each jurisdiction) | Share capital | Sub debt |
| 8 | Amount recognised in regulatory capital (currency in millions, as of most recent reporting date) | EUR 10.0 Millions | EUR 20.0 Millions |
| 9 | Nominal amount of instrument | EUR 10.0 Millions | N/A |
| 9a | Issue price | At par | N/A |
| 9b | Redemption price | N/A | N/A |
| 10 | Accounting classification | Equity | at amortized cost |
| 11 | Original date of issuance | 1.7.2011 | EUR 10,0 Millions as of 22.3.2004, EUR 10,0 Millions as of 15.4.2008 |
| 12 | Perpetual or dated | Perpetual | Perpetual |
| 13 | Original maturity date | No maturity date | No maturity |
| 14 | Issuer call subject to prior supervisory approval | No | Yes |

| 15 | Optional call date, contingent call dates and redemption amount | N/A | N/A |
|-----|---|--|---|
| 16 | Subsequent call dates, if applicable | N/A | N/A |
| | Coupons/ dividends | | |
| 17 | Fixed or floating dividend/coupon | N/A | Floating |
| 18 | Coupon rate and any related index | No | 3-Months-Euro-Libor plus 150 bps |
| 19 | Existence of a dividend/coupon | No | No |
| 20a | Fully discretionary, partially discretionary or mandatory (in terms of timing) | Mandatory (shareholders' resolution) | Mandatory |
| 20b | Fully discretionary, partially discretionary or mandatory (in terms of amount) | Mandatory (shareholders' resolution) | Mandatory |
| 21 | Existence of step up or other incentive to redeem | No | No |
| 22 | Noncumulative or cumulative | Noncumulative | Noncumulative |
| 23 | Convertible or non-convertible | Non-convertible | Non-convertible |
| 24 | If convertible: Conversion trigger(s) | N/A | N/A |
| 25 | If convertible: fully or partially | N/A | N/A |
| 26 | If convertible: Conversion rate | N/A | N/A |
| 27 | If convertible: mandatory or optional conversion | N/A | N/A |
| 28 | If convertible: specify instrument type convertible to | N/A | N/A |
| 29 | If convertible: specify issuer of instrument it converts into | N/A | N/A |
| 30 | Write-down features | No | No |
| 31 | If write-down: write-down trigger(s) | N/A | N/A |
| 32 | If write-down: full or partial | N/A | N/A |
| 33 | If write-down: permanent or temporary | N/A | N/A |
| 34 | If temporary write-down: description of write-up mechanism | N/A | N/A |
| 35 | Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument) | Tier 2capital | Repayment of loan only after claims of other, non- subordinated creditors |
| 36 | Non-compliant transitioned features | No | No |
| 37 | If yes, specify non-compliant features | N/A | N/A |



| Commo | n Equity Tier 1: Instruments and reserves | (A) Amount on the day of disclosure | (B) Regulation (EU) No. 575/2013 Article reference |
|-------|--|---|---|
| 1 | Capital instruments and the related share premium accounts | 10,0 | 26 (1), 27, 28, 29 |
| | of which: Instrument type 1 | 10.0 | EBA list 26 (3) |
| | of which: Instrument type 2 | N/A | EBA list 26 (3) |
| | of which: Instrument type 3 | N/A | EBA list 26 (3) |
| 2 | Retained earnings | 246.3 | 26 (1) (c) |
| 3 | Accumulated other comprehensive income (and other reserves) | 86.3 | 26 (1) |
| 3a | Funds for general banking risk | N/A | 26 (1) (f) |
| 4 | Amount of qualifying items referred to in Article 484 (3) and the related share premium accounts subject to phase out from CET1 | N/A | 486 (2) |
| 5 | Minority interests (amount allowed in consolidated CET1) | N/A | 84 |
| 5a | Independently reviewed interim profits net of any foreseeable charge or dividend | N/A | 26 (2) |
| 6 | Common equity tier 1 capital (CET1) before regulatory adjustments | 342.6 | Sum of rows 1 to 5a |
| | Common Equity Tier 1 (CET1) capital: regulatory adjustments | | |
| 7 | Additional value adjustments (negative amount) | N/A | 34, 105 |
| 8 | Intangible assets (net of related tax liability) (negative amount) | N/A | 36 (1) (b), 37 |
| 9 | Empty set in the EU | | |
| 10 | Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount) | N/A | 36 (1) (c), 38 |
| 11 | Fair value reserves related to gains or losses on cash flow hedges | N/A | 33(1) (a) |
| 12 | Negative amounts resulting from the calculation of expected loss amounts | N/A | 36 (1) (d), 40, 159 |
| 13 | Any increase in equity that results from securitised assets (negative amount) | N/A | 32 (1) |
| 14 | Gains or losses on liabilities valued at fair value resulting from changes in own credit standing | N/A | 33(1) (b) |
| 15 | Defined-benefit pension fund assets (negative amount) | N/A | 36 (1) (e), 41 |
| 16 | Direct and indirect holdings by an institution of own CET1 instruments (negative amount) | N/A | 36 (1) (f), 42 |
| 17 | Direct, indirect and synthetic holdings of the CET 1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount) | N/A | 36 (1) (g), 44 |
| 18 | Direct, indirect and synthetic holdings of the CET 1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount) | N/A | 36 (1) (h), 43, 45, 46, 49 (2) (3), 79 |
| 19 | Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount) | N/A | 36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) to (3), 79 |
| 20 | Empty set in the EU | | |
| 20a | Exposure amount which qualifies for a RW of 1250%, where the institution opts for the deduction alternative | N/A | 36 (1) (k) |
| 20b | Of which: qualifying holdings outside the financial sector (negative amount) | N/A | 36 (1) (k) (i), 89 to 91 |
| 20c | Of which: securitization positions (negative amount) | N/A | 36 (1) (k) (ii) 243 (1) (b) 244 (1) (b) 258 |
| 20d | Of which: free deliveries (negative amount) | N/A | 36 (1) (k) (iii), 379 (3) |
| 21 | Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met) (negative amount) | N/A | 36 (1) (c), 38, 48 (1) (a) |

Table 4: Disclosure of own funds (DVO 1423/2013 Annex IV)



| 22 | Amount exceeding the 15% threshold (negative amount) | N/A | 48 (1) |
|-----|---|-------|--|
| 23 | Of which: amount of direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities | N/A | 36 (1) (i), 48 (1) (b) |
| 24 | Empty set in the EU | | |
| 25 | Of which: deferred tax assets arising from temporary differences | N/A | 36 (1) (c), 38, 48 (1) (a) |
| 25a | Losses for the current financial year (negative amount) | N/A | 36 (1) (a) |
| 25b | Foreseeable tax charges relating to CET1 items (negative amount) | N/A | 36 (1) (I) |
| 27 | Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative emount) | N/A | 36 (1) (j) |
| 28 | Total regulatory adjustments to Common Equity Tier 1 (CET1) | N/A | Sum of rows 7 to 20a, 21 22 and 25a to 27 |
| 29 | Common Equity Tier 1 (CET1) capital | 342.6 | Row 6 minus row 28 |
| | Additional Tier 1 (AT1) capital: Instruments | | |
| 30 | Capital instruments and the related share premium access | N/A | 51, 52 |
| 31 | Of which: classified as equity under applicable accounting standards | N/A | |
| 32 | Of which: classified as liability under applicable accounting standards | N/A | |
| 33 | Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1 | N/A | 486 (3) |
| 34 | Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties | N/A | 85, 86 |
| 35 | Of which: instruments issued by subsidiaries subject to phase out | N/A | 486 (3) |
| 36 | Additional Tier 1 (AT1) capital before regulatory adjustments | N/A | Sum of rows 30, 33 and 34 |
| | Additional Tier 1 (AT1) capital: regulatory adjustments | | |
| 37 | Direct and indirect holdings by an institution of own AT1 instruments (negative amount) | N/A | 52 (1) (b), 56 (a), 57 |
| 38 | Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount) | N/A | 56 (b), 58 |
| 39 | Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount) | N/A | 56 (c), 59, 60, 79 |
| 40 | Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount) | N/A | 56 (d), 59, 79 |
| 41 | Empty set in the EU | | |
| 42 | Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount) | N/A | 56 (e) |
| 43 | Total regulatory adjustments to Additional Tier 1 (AT1) capital | N/A | Sum of rows 37 to 42 |
| 44 | Additional Tier 1 (AT1) capital | N/A | Row 36 minus row 43 |
| 45 | Tier 1 capital (T1 = CET1 + AT1) | 342.6 | Sum of row 29 and row 44 |
| | Tier 2 (T2) capital: Instruments and provisions | | |
| 46 | Capital instruments and the related share premium accounts | 20.0 | 62, 63 |
| 47 | Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2 | N/A | 486 (4) |
| 48 | Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties | N/A | 87, 88 |
| 49 | Of which: instruments issued by subsidiaries subject to phase out | N/A | 486 (4) |
| 50 | Credit risk adjustments | N/A | 62 (c) & (d) |
| 51 | Tier 2 (T2) capital before regulatory adjustments | 20.0 | ., ., |
| | Tier 2 (T2) capital: regulatory adjustments | | |
| 52 | Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount) | N/A | 63 (b) (i), 66 (a), 67 |
| 53 | Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount) | N/A | 66 (b), 68 |
| 54 | Direct and indirect holdings of the T2 instruments and subordinated | N/A | 66 (c), 69, 70, 79 |

| | significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount) | | |
|-----|--|-------|--|
| 55 | Direct and indirect 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) | N/A | 66 (d), 69, 79 |
| 56 | Empty set in the EU | | |
| 57 | Total regulatory adjustments to Tier 2 (T2) capital | N/A | Sum of rows 52 to 56 |
| 58 | Tier 2 (T2) capital | 20.0 | Row 51 minus row 57 |
| 59 | Total capital (TC = T1 + T2) | 362.6 | Sum of row 45 and row 58 |
| 60 | Total risk-weighted assets | 381.7 | |
| | Capital ratios and buffers | | |
| 61 | Common Equity Tier 1 (as a percentage of total risk exposure amount) | 89.7% | 92 (2) (a) |
| 62 | Tier 1 (as a percentage of total risk exposure amount) | 89.7% | 92 (2) (b) |
| 63 | Total capital (as a percentage of total risk exposure amount) | 95.0% | 92 (2) (c) |
| 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 systemically important institution buffer expressed as a percentage of risk exposure amount) | 6.4% | CRD 128, 129, 130, 131 133 |
| 65 | of which: capital conservation buffer requirement | 1.9% | |
| 66 | of which: countercyclical buffer requirement | 0.0 | |
| 67 | of which: systemic risk buffer requirement | 0.0 | |
| 67a | of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) | 0.0 | |
| 68 | Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount) | 85.2% | CRD 128 |
| 69 | [non relevant in EU regulations] | | |
| 70 | [non relevant in EU regulations] | | |
| 71 | [non relevant in EU regulations] | | |
| | Amounts below the 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) | 0.0 | 36 (1) (h), 46, 45, 56 (c) 59, 60, 66 (c), 69, 70 |
| 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) | 0.0 | 36 (1) (i), 45, 48 |
| 74 | Empty set in the EU | | |
| 75 | Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met) | 0.0 | 36 (1) (c), 38, 48 |
| | Applicable caps on the inclusion of provisions in Tier 2 | | |
| 76 | Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap) | N/A | 62 |
| 77 | Cap on inclusion of credit risk adjustments in T2 under standardised approach | N/A | 62 |
| 78 | Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap) | N/A | 62 |
| 79 | Cap for inclusion of credit risk adjustments in T2 under internal ratings- based approach | N/A | 62 |
| | 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 | N/A | 484 (3), 486 (2) & (5) |
| 81 | Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities) | N/A | 484 (3), 486 (2) & (5) |
| 82 | - Current cap on AT1 instruments subject to phase out arrangements | N/A | 484 (4), 486 (3) & (5) |
| 83 | Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities) | N/A | 484 (4), 486 (3) & (5) |
| 84 | - Current cap on T2 instruments subject to phase out arrangements | N/A | 484 (5), 486 (4) & (5) |
| 85 | Amount excluded from T2 due to cap (excess over cap after redemptions and maturities) | N/A | 484 (5), 486 (4) & (5) |
| | | | |

The risk-based capital requirements are expressed as capital ratios that compare measures of regulatory capital to RWAs. The CET1 ratio is defined as CET1 divided by RWAs. The Tier 1 capital

Goldman Sachs



ratio is defined as Tier 1 capital divided by RWAs. The total capital ratio is defined as total capital divided by RWAs.

As of the balance sheet date December 31, 2018 GSBE had no relevant credit exposures to any of the countries that have a countercyclical capital buffer (CCyB) requirement, hence a CCyB requirement of 0.0%.

7. Capital Requirements

As at the date of these disclosures, GSBE used the standardised approach for measurement of regulatory capital requirements in accordance with Article 438 (c) of CRR for counterparty default risks. The credit assessment of rating agencies in accordance with Article 135 of CRR is used for the identification of exposures to the exposure classes' central government and central banks, institutions and corporates.

As of December 31, 2018 GSBE had capital levels in excess of its minimum capital requirements.

| In millions EUR as of December 31, 2018 | Risk-weighted positions | Capital requirement |
|---|----------------------------|---------------------|
| Counterparty (credit) risk to | | |
| Central governments and central banks | 0.0 | 0.0 |
| Regional or local authorities | - | - |
| Public entities | - | - |
| Multilateral development banks | - | - |
| International organisations | - | - |
| Institutions | 69.8 | 5.6 |
| Of which derivative risk positions | 0.0 | 0.0 |
| Of which from securities repurchase agreements | 0.4 | 0.0 |
| Corporates | 30.7 | 2.5 |
| Retail business | - | - |
| Real estate secured positions | - | - |
| Defaulted positions | - | - |
| High-risk positions | - | - |
| In form of covered bonds | - | - |
| Securitization positions | - | - |
| Institutions and corporates with short-term credit rating | - | - |
| In form of investments in OGA | - | - |
| Equity exposures | 0.8 | 0.1 |
| Other items | 10.8 | 0.9 |
| Total | 112.1 | 9.1 |

Table 5: Regulatory own funds requirements in accordance with Article 438 (c) and 439 of CRR

GSBE enters into reverse repurchase agreements to re-invest a portion of its excess liquidity. The company considers financial collateral in the context of the calculation of capital requirements in accordance with the comprehensive method set out in Article 223 of CRR. Subject to daily revaluation and the requirement to minimize counterparty default risk, regulatory volatility adjustments are contractually agreed in accordance with Article 224 of CRR. Only collateral under Article 197 of CRR is contractually accepted.

Collateralisation for other credit risks e.g. through cash collateral is determined case-by-case by the credit department and monitored by Controllers.



The own funds requirements for market risk is calculated for GSBE in accordance with Article 352 of CRR. There were only foreign currency risks as at the reporting date.

Table 6: Regulatory own funds requirements in accordance with Article 438 (e) of CRR

| In Millions EUR as of December 31, 2018 | Risk-weighted positions | Capital requirement |
|---|-------------------------|---------------------|
| Market risk positions | | |
| Interest rate risk | - | - |
| Equity risk | - | - |
| Foreign currency risk | 15.8 | 1.3 |
| Commodities risk | - | - |
| Other | - | - |
| Trading book | - | - |
| Total | 15.8 | 1.3 |

Operational risks are measured using the Basic Indicator Approach in accordance with Article 315 of CRR.

Table 7:Regulatory own funds requirements for operational risk in accordance with Article 438(f) of CRR

| In Millions EUR as of December 31, 2018 | Risk-weighted positions | Capital requirement |
|---|-------------------------|---------------------|
| Basic Indicator Approach | 253.9 | 20.3 |

The own funds requirements for CVA risk are calculated in accordance with Article 382 of CRR.

Table 8: Regulatory own funds requirements for CVA risk

| In Millions EUR as of December 31, 2018 | Risk-weighted positions | Capital requirement |
|---|-------------------------|---------------------|
| CVA risk | 0.0 | 0.0 |
| | | |

8. Counterparty Risk

As of the balance sheet date, interest rate swaps were conducted by GSBE only for the purpose of hedging interest rate risks arising from issued promissory note loans (Schuldscheindarlehen) and registered bonds (Namensschuldverschreibungen). Own funds requirements were calculated by GSBE using the Mark-to-Market Method in accordance with Article 274 of CRR. The derivative financial instruments were assigned to the non-trading book as of December 31, 2018.

The ISDA Master Agreement and the Tri-Party Repo Master Agreement contain the usual market close-out netting provisions. In order to minimise counterparty risk from derivative transactions, GSBE also receives cash collateral with obligations for additional payments. The positive values of future replacement costs as well as the utilisation of cash collateral are monitored daily by Controllers. Risk-weighted exposures as well as own funds requirements as of December 31, 2018 are shown in Table 5.

A reduction of the credit rating of GSBE would not have any effect on the amount of the securities to be provided.



As of the balance sheet date of December 31, 2018, GSBE had no items in the trading book.

| rabio o. Rogalatory own rando rogalionionto for obantorparty not | Table 9: | Regulatory own funds requirements for counterparty risk |
|--|----------|---|
|--|----------|---|

| In millions EUR as of December 31, 2018 | Before netting and collateral | Netting | Held collateral | After netting and collateral | Nominal value |
|---|-------------------------------------|---------|--------------------|------------------------------------|------------------|
| Interest-related contracts | 33.8 | 0.0 | 33.8 | 0.0 | 151.5 |
| Currency-related contracts | - | - | - | - | - |
| Share-based contracts | - | - | - | - | - |
| Credit derivatives | - | - | - | - | - |
| Commodity related contracts | - | - | - | - | - |
| Other | - | - | - | - | - |
| Total | 33.8 | 0.0 | 33.8 | 0.0 | 151.5 |

9. Credit Adjustments

Credit risk adjustments are defined in accordance with Article 4 (1) (95) of CRR in conjunction with Delegated Regulation (EU) 183/2014 as the amount of specific and general loan loss provision for credit risks.

In the financial year 2018, GSBE had no need for individual or general value adjustment of exposures. There were no past due exposures as at the balance sheet date.

Outgoing invoices, especially those in the Investment Banking business, are defined by GSBE as "past due" when these are entirely or partially unpaid on more than 90 consecutive calendar days. In individual cases, the Executive Board adopts a loan loss provision on the basis of analysis by the Credit Department and Controllers.

Average values are based on the average of the four quarters in 2018.

However, the Company does not operate lending business as such in the financial year 2018.

Table 10: Total amount of exposures accounting offsets and before credit risk mitigation broken down by exposure classes and the corresponding average amount of exposures in accordance with Article 442 (c) of CRR

| In millions EUR as of December 31, 2018 | Balance sheet risk positions | Average value 2018 |
|---|---------------------------------|--------------------|
| Counterparty (credit) risk to | | |
| Central governments and central banks | 336.5 | 336.2 |
| Regional or local authorities | - | - |
| Public entities | - | - |
| Multilateral development banks | - | - |
| International organisations | - | - |
| Institutions | 380.0 | 349.5 |

| Of which: derivative risk positions | 33.8 | 34.5 |
|---|-------|-------|
| Of which: from securities repurchase agreements | 1.0 | 0.4 |
| Of which: CVA | - | - |
| Corporates | 30.7 | 27.8 |
| Retail business | - | - |
| Real estate secured positions | - | - |
| Defaulted positions | - | - |
| High-risk positions | - | - |
| In form of covered bonds | - | - |
| Securitization positions | - | - |
| Institutions and corporates with short-term credit rating | - | - |
| In form of investments in OGA | - | - |
| Equity exposures | 0.4 | 4.0 |
| Other items | 10.8 | 10.8 |
| Total | 758.4 | 728.3 |

Table 11:Main geographical areas broken down by exposure classes in accordance with Article442 (d) of CRR

| In Millions EUR as of December 31, 2018 | Central governments and central banks | Institutions | Corporates | Equity exposures | Other items |
|--|--|--------------|------------|---------------------|-------------|
| Germany | 336.5 | 6.1 | 28.1 | 0.4 | 10.8 |
| European monetary union | - | 1.6 | 0.1 | - | - |
| Europe | - | 368.8 | - | - | - |
| Africa | - | - | - | - | - |
| America | - | 3.5 | 2.5 | - | - |
| Asia | - | - | - | - | - |
| Not assigned to any geographic area | - | - | - | - | - |
| Total | 336.5 | 380.0 | 30.7 | 0.4 | 10.8 |

The assignment of individual countries to geographical areas is performed according to the country listings of the German Bundesbank. The region "Europe" encompasses all countries of geographical Europe, with the exception of Germany and the other states of the European Monetary Union, which are shown separately.

Table 12: Balance sheet exposures by main sectors and exposure classes in accordance with Article 442 (e) of CRR

| In Millions EUR as of December 31, 2018 | Central governments and central banks | Institutions | Corporates | Equity exposures | Other items |
|--|--|--------------|------------|---------------------|-------------|
| Banks | 336.1 | 6.3 | - | - | - |
| Public households | 0.4 | - | - | - | - |
| Private individuals and companies | - | 373.7 | 24.4 | 0.4 | - |
| Other | - | - | 6.3 | 0.0 | 10.8 |
| Total | 336.5 | 380.0 | 30.7 | 0.4 | 10.8 |



Table 13: Exposures by residual maturity and exposure classes in accordance with Article 442 (f) of CRR

| In millions EUR as of December 31, 2018 | Without residual maturity | < 1 Year | < 3 Years | > 5 Years |
|---|---------------------------------|----------|--------------|--------------|
| Counterparty (credit) risk to | | | | |
| Central governments and central banks | 336.5 | - | - | - |
| Regional or local authorities | - | - | - | - |
| Public entities | - | - | - | - |
| Multilateral development banks | - | - | - | - |
| International organisations | - | - | - | - |
| Institutions | 345.2 | 0.4 | 0.6 | 33.8 |
| Of which derivative risk positions | - | - | - | 33.8 |
| Of which from securities repurchase agreements | - | 0.4 | 0.6 | - |
| Of which CVA | - | - | - | - |
| Corporates | 30.7 | - | - | - |
| Retail business | - | - | - | - |
| Real estate secured positions | - | - | - | - |
| Defaulted positions | - | - | - | - |
| High-risk positions | - | - | - | - |
| In form of covered bonds | - | - | - | - |
| Securitization positions | - | - | - | - |
| Institutions and corporates with short-term credit rating | - | - | - | - |
| In form of investments in OGA | - | - | - | - |
| Equity exposures | 0.4 | - | - | - |
| Other items | 10.8 | - | - | - |
| Total | 723.6 | 0.4 | 0.6 | 33.8 |

The contractual residual maturities have been organised in accordance with the German Ordinance Regarding Accounting for Banks and Financial Service Institutions (RechKredV). Exposures due on demand are combined with exposures without residual maturities.

10. Asset Encumbrance

Asset encumbrance refers to the pledging or use of an asset as a means to secure, collateralize or credit-enhance any on-balance-sheet or off-balance-sheet transaction from which it cannot be freely withdrawn. Median values are computed over the preceding four quarterly data points.

There were no assets considered to be encumbered in the financial year 2018.

Table 14: Book value of encumbered and unencumbered assets in accordance with Article 443 CRR

| In millions EUR | Carrying amount of encumbered assets | Fair value of encumbered assets | Carrying amount of unencumbered assets | Fair value of unencumbered assets |
|--------------------|--|---------------------------------------|--|---|
| Assets | - | - | 702.5.1 | - |
| Equity instruments | - | - | - | - |
| Debt instruments | - | - | - | - |

¹ The unencumbered assets primarily consist of loans on demand



| of which: covered bonds | - | - | - | - |
|--|---|---|-------|---|
| of which: asset-backed securities | - | - | - | - |
| of which: issued by general governments | - | - | - | - |
| of which: issued by financial corporations | - | - | - | - |
| of which: issued by non-financial corporations | - | - | - | - |
| Other assets | - | - | 702.5 | - |

Table 15: Collateral received for encumbered and unencumbered assets in accordance with Article 443 CRR

| In millions EUR | | Unencumbered |
|---|--|---|
| | Fair value of encumbered collateral received or own debt securities issued | Fair value of collateral received or own debt securities issued available for encumbrance |
| Collateral received by the reporting institution | - | 9.4 |
| Loans on demand | - | - |
| Equity instruments | - | 1.0 |
| Debt securities | | 4.4 |
| of which: covered bonds | - | • |
| of which: asset-backed securities | - | - |
| of which: issued by general governments | | |
| of which: issued by financial corporations | - | 3.0 |
| of which: issued by non-financial corporations | - | - |
| Loans and advances other than loans on demand | | |
| Other collateral received | - | - |
| Own deb securities issued other than own covered bonds or ABSs | | - |
| Own covered bonds and asset- backed securities issued and not yet pledged | - | - |
| Total Assets, collateral received and own debt securities issued | - | - |

Table 16: Sources of Encumbrance in accordance with Article 443 CRR

| In Millions EUR | Matching liabilities, contingent liabilities or securities lent | Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered |
|--|---|---|
| Carrying amount of selected financial liabilities | | |

11. Utilisation of External Rating Agencies

For risk-weighted exposure amounts calculated by GSBE in accordance with Part Three, Title II, Chapter 2 of CRR, external rating agencies (ECAIs) were appointed for the following receivables categories in accordance with Articles 135 and 444 of CRR:

Table 17: Appointed rating agencies (ECAIs)

| Credit assessment related exposure category | Nominated rating agency |
|---|---|
| Central governments and central banks | Fitch Ratings, Standard & Poor's Rating Service, Moody's Investors Service |
| Institutions | Fitch Ratings, Standard & Poor's Rating Service, Moody's Investors Service |
| Corporates | Fitch Ratings, Standard & Poor's Rating Service, Moody's Investors Service |

Calculation of risk-weighted exposure amounts was performed in accordance with Article 113 of CRR in conjunction with Article 135 of CRR. In cases where there is only one external credit rating, it is directly taken into account. In cases where there is more than one external rating, a determination is made of the relevant rating in accordance with the regulatory requirements for multiple ratings. Receivable amounts for which risk-weightings have been assigned to a credit quality step corresponding to that of a central government are shown in Tables 18 and 19.

| In Millions EUR as of December 31, 2018 | Credit Quality Steps | | | | | | | |
|--|----------------------|-------|------|---|---|---|--------------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | No rating | Total |
| Counterparty (credit) risk to | | | | | | | | |
| Central governments and central banks | 336.5 | - | - | - | - | - | - | 336.5 |
| Regional or local authorities | - | - | - | - | - | - | - | - |
| Public entities | - | - | - | - | - | - | - | - |
| Multilateral development banks | - | - | - | - | - | - | - | - |
| International organisations | - | - | - | - | - | - | - | - |
| Institutions | 0.1 | 373.0 | 0.3 | - | - | - | 6.6 | 380.0 |
| Of which derivative risk positions | - | 33.8 | - | - | - | - | - | 33.8 |
| Of which from securities repurchase agreements | - | 1.0 | - | - | - | - | - | 1.0 |
| Of which CVA | - | - | - | - | - | - | - | - |
| Corporates | - | 3.2 | 16.0 | - | - | - | 11.6 | 30.7 |

Table 18: Receivable amounts before credit risk mitigation by credit quality step

| Retail business | - | - | - | - | - | - | - | - |
|---|-------|-------|------|---|---|---|------|-------|
| Real estate secured positions | - | - | - | - | - | - | - | - |
| Defaulted positions | - | - | - | - | - | - | - | - |
| High-risk positions | - | - | - | - | - | - | - | - |
| In form of covered bonds | - | - | - | - | - | - | - | - |
| Securitization positions | - | - | - | - | - | - | - | - |
| Institutions and corporates with short-term credit rating | - | - | - | - | - | - | - | - |
| In form of investments in OGA | - | - | - | - | - | - | - | - |
| Equity exposures | - | - | - | - | - | - | 0.4 | 0.4 |
| Other items | - | - | - | - | - | - | 10.8 | 10.8 |
| Total | 336.6 | 376.2 | 16.3 | - | - | - | 29.3 | 758.4 |

Table 19: Receivable amounts after credit risk mitigation by credit quality step

| In Millions EUR as of December 31, 2018 | | Cre | dit Quality | Steps | | | | |
|---|-------|-------|-------------|-------|---|---|--------------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | No rating | Total |
| Counterparty (credit) risk to | | | | | | | | |
| Central governments and central banks | 336.5 | - | - | - | - | - | - | 336.5 |
| Regional or local authorities | - | - | - | - | - | - | - | - |
| Public entities | - | - | - | - | - | - | - | - |
| Multilateral development banks | - | - | - | - | - | - | - | - |
| International organisations | - | - | - | - | - | - | - | - |
| Institutions | 0.1 | 339.2 | 0.3 | - | - | - | 6.6 | 346.2 |
| Of which derivative risk positions | - | - | - | - | - | - | - | - |
| Of which from securities repurchase agreements | - | 1.0 | - | - | - | - | - | 1.0 |
| Of which CVA | - | - | - | - | - | - | - | - |
| Corporates | - | 3.2 | 16.0 | - | - | - | 11.6 | 30.7 |
| Retail business | - | - | - | - | - | - | - | - |
| Real estate secured positions | - | - | - | - | - | - | - | - |
| Defaulted positions | - | - | - | - | - | - | - | - |
| High-risk positions | - | - | - | - | - | - | - | - |
| In form of covered bonds | - | - | - | - | - | - | - | - |
| Securitization positions | - | - | - | - | - | - | - | - |
| Institutions and corporates with | - | - | - | - | - | - | - | - |



| short-term credit rating | | | | | | | | |
|-------------------------------|-------|-------|------|---|---|---|------|-------|
| In form of investments in OGA | - | - | - | - | - | - | - | - |
| Equity exposures | - | - | - | - | - | - | 0.4 | 0.4 |
| Other items | - | - | - | - | - | - | 10.8 | 10.8 |
| Total | 336.6 | 342.4 | 16.3 | - | - | - | 29.3 | 724.6 |

12. Market Risk

With regards to the disclosure obligations under Article 445 of CRR, please refer to the description of the capital requirements for market risk in Section No. 7 "Capital Requirements".

13. Operational Risk

With regards to the disclosure obligations under Article 446 of CRR, please refer to the description of the capital requirements for operational risk in Section No 7 "Capital Requirements".

14. Exposures in Equities not included in the Trading Book

Equity positions comprise of investments in subsidiaries. These are not held for trading purposes. Please refer to the information on GSBE's merger with GS Gestión disclosed in Section No 1 "Introduction" and the additional description in Section No 9 "Credit Adjustments".

15. Exposure to interest rate risk on positions not included in the trading book

Please refer to the information on interest rate risk in the risk report of the GSBE management report for the fiscal year 2018 as well as Section No 8, "Counterparty Risk".

16. Application of Techniques of Credit Risk Mitigation

Concentration or correlation risks that are identified in the context of the annual risk inventory or on an ad-hoc basis are subject to increased observation by the Credit Department and are analysed regularly with appropriate stress tests and if necessary restricted to appropriate limits. As a result of the current business model, these are in particular the concentration with subsidiary companies of the Goldman Sachs Group, potential concentration or correlation risks from securities received as collateral as well as the geographical and in part also sectoral concentrations of unsecured credit risks toward third parties. Credit risks with the Goldman Sachs Group are primarily short-term or secured, these are restricted to limits set by the Executive Board and subjected to regular stress tests. GSBE restricts possible concentration and correlation risks associated with securities received as collateral through appropriate restrictions on quality and concentrations as well as security premiums and monitors these e.g. through regular checks and stress tests of the securities received as collateral.

In accordance with Section 10 of RechKredV only obligations to counterparties that are without conditions and payable on demand can be offset against ongoing exposures to the same counterparty that are payable on demand, as long as the calculation of interest and commissions are agreed upon for them so that they are provided to the counterparty as if they were posted to a single account.



| Table 20: | Credit risk mitigation by risk class |
|-----------|--------------------------------------|
|-----------|--------------------------------------|

| In millions EUR as of December 31, 2018 | Gross risk position | Credit risk mitigation | Net risk position |
|--|------------------------|------------------------|-------------------|
| Counterparty (credit) risk to | | | |
| Central governments and central banks | 336.5 | - | 336.5 |
| Regional or local authorities | - | - | - |
| Public entities | - | - | - |
| Multilateral development banks | - | - | - |
| International organisations | - | - | - |
| Institutions | 380.0 | 33.8 | 346.2 |
| Of which derivative risk positions | 33.8 | 33.8 | - |
| Of which from securities repurchase agreements | 1.0 | 0 | 1.0 |
| Of which CVA | - | - | - |
| Corporates | 30.7 | - | 30.7 |
| Retail business | - | - | - |
| Real estate secured positions | - | - | - |
| Defaulted positions | - | - | - |
| High-risk positions | - | - | - |
| In form of covered bonds | - | - | - |
| Securitization positions | - | - | - |
| Institutions and corporates with short-term credit rating | - | - | - |
| In form of investments in OGA | - | - | - |
| Equity exposures | 0.4 | - | 0.4 |
| Other items | 10.8 | - | 10.8 |
| Total | 758.4 | 33.8 | 724.6 |

17. Leverage Ratio

GSBE's Leverage Ratio was 46.0% as of December 31, 2018. The leverage ratio is calculated, monitored and reported monthly to the Executive Board and Risk Committee in the context of the monthly risk report.

Table 21: Leverage Ratio common disclosure in accordance with Article 451 of CRR

| In Million | s EUR as of December 31, 2018 | | | | |
|------------|---|-------|--|--|--|
| On-balanc | e sheet exposures (excluding derivatives and SFTs) | | | | |
| 1 | On-balance sheet items (excluding derivatives and SFTs, but including collateral) | 723.5 | | | |
| 2 | Asset amounts deducted in determining Tier 1 capital | | | | |
| 3 | Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2) | 723.5 | | | |
| Derivative | Derivative exposures | | | | |
| 4 | Replacement cost associated with derivatives transactions | 0 | | | |
| 5 | Add-on amounts for PFE associated with derivatives transactions | 1.9 | | | |
| EU-5a | Exposure determined under Original Exposure Method | | | | |
| 6 | Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework | | | | |
| 7 | ((Deductions of receivables assets for cash variation margin provided in derivatives transactions) | | | | |
| 8 | (Exempted CCP leg of client-cleared trade exposures) | | | | |

| 9 | Adjusted effective notional amount of written credit derivatives | |
|------------|--|-------|
| 10 | (Adjusted effective notional offsets and add-on deductions for written credit derivatives) | |
| 11 | Total derivative exposures (sum of lines 4 to 10) | 1.9 |
| Securities | financing transaction exposures | |
| 12 | Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions | 18.7 |
| 13 | (Netted amounts of cash payables and cash receivables of gross SFT assets) | |
| 14 | Counterparty credit risk exposure for SFT assets | |
| EU-14a | Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013 | |
| 15 | Agent transaction exposures | |
| EU-15a | (Exempted CCP leg of client-cleared SFT exposure) | |
| 16 | Total securities financing transaction exposures (sum of lines 12 to 15a) | 18.7 |
| Other off | -balance sheet exposures | |
| 17 | Off-balance sheet exposures at gross notional amount | |
| 18 | (Adjustments for conversion to credit equivalent amounts) | |
| 19 | Other off-balance sheet exposures (sum of lines 17 to 18) | |
| Exempte | d exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet) | |
| EU-19a | (Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet)) | |
| EU-19b | (Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet)) | |
| Capital a | nd total exposures | |
| 20 | Tier 1 capital | 342.6 |
| 21 | Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b) | 744.1 |
| Leverage | e ratio | |
| 22 | Leverage ratio | 46.0% |
| Choice o | n transitional arrangements and amount of derecognised fiduciary items | |
| EU-23 | Choice on transitional arrangements for the definition of the capital measure | |
| EU-24 | Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) NO 575/2013 | |

Table 22: Summary reconciliation of accounting assets and exposures under Article 451 of CRR

| In Millio | n EUR as of December 31, 2018 | |
|-----------|---|-------|
| 1 | Total assets according to published financial statements | 750.3 |
| 2 | Adjustment for companies that are consolidated for accounting purposes but do not belong to the regulatory scope of consolidation. | |
| 3 | (Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR") | |
| 4 | Adjustments for derivative financial instruments | 1.9 |
| 5 | Adjustments for securities financing transactions (SFT) | |
| 6 | Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures) | |
| EU-6a | (Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013) | |
| EU-6b | (Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013) | |



| 8 | Total leverage ratio exposure | 744.1 | |
|---|-------------------------------|-------|--|
| 7 | Other adjustments | -8.1 | |

Table 23: Breakdown of on-balance sheet exposures (excluding derivatives, SFT and exempted exposures) under Article 451 of CRR

| In Million EUR as of December 31, 2018 | | | |
|--|---|-------|--|
| EU-1 | Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which: | 723.5 | |
| EU-2 | Trading book exposures | | |
| EU-3 | Banking book exposures, of which: | 723.5 | |
| EU-4 | Covered Bonds | | |
| EU-5 | Exposures treated as sovereigns | 336.5 | |
| EU-6 | Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns | | |
| EU-7 | Institutions | 345.1 | |
| EU-8 | Secured by mortgages of immovable properties | | |
| EU-9 | Retail exposures | | |
| EU-10 | Corporates | 30.7 | |
| EU-11 | Exposures in default | | |
| EU-12 | Other exposures (i.e. equity, securitisations, and other non-credit obligation assets) | 11.2 | |

18. Liquidity Coverage Ratio (LCR)

The Liquidity Coverage Ratio (LCR) is designed to ensure that a firm maintains an adequate amount of unencumbered high-quality liquid assets (HQLA) equal to or greater than the total net cash outflows (NCOs) over a prospective 30 calendar-day stress scenario. GSBE is subject to the LCR requirements as set out in the European Commission Delegated Regulation 2015/61 (LCR Delegated Act) effective October 1, 2015.

The EBA guidelines on LCR disclosure (EBA/GL/2017/01) require firms to disclose, on an annual basis, the average monthly LCR for the trailing twelve-months.

GSBE's average monthly LCR for the trailing twelve-month period ended December 2018 was 16,535%, reflecting current low level of absolute liquidity risk in the entity. This ratio is based on our current interpretation and understanding of the LCR Delegated Act and may evolve as its interpretation and application is discussed with our regulators.

The table below presents a breakdown of the company's LCR calculated in accordance with the LCR Delegated Act. The LCR can be calculated as the ratio of HQLA to NCOs.



Table 24: Breakdown of the Liquidity Coverage Ratio according to the LCR Delegated Act

| In Millions EUR as of December 31, 2018 | Twelve Months Average-weighted |
|---|-----------------------------------|
| Total high-quality liquid assets | 321.8 |
| Net cash outflows | 2.2 |
| Liquidity coverage ratio ¹ | 16,535% |

¹The ratio reported in this row is calculated as average of the monthly LCR's for the trailing twelve-month period and may not equal the calculation of ratio using component amounts reported in rows "Total high-quality liquid assets" and "Net cash outflows"

We expect business-as-usual fluctuations in our client activity, business mix and overall market environment to affect our average LCR on an ongoing basis.

High-Quality Liquid Assets

Total HQLA represents unencumbered, high-quality liquid assets held by the company and comprises mainly balances held at Central Banks.

Net Cash Outflows

The LCR Delegated Act defines NCOs as the net of cash outflows and inflows during a prospective stress period of 30 calendar days. The NCOs in GSBE are largely comprised of prospective outflows related to the company's unsecured funding and derivative positions and inflows related to short term placements with affiliates

Unsecured Funding

The company's primary source of funding is unsecured long-term borrowings, including registered bonds (Namensschuldverschreibungen), loan against borrower's notes (Schuldscheindarlehen) and funding from Group Inc. and affiliates. The LCR Delegated Act requires that the NCOs calculation reflects a firm's upcoming maturities of unsecured long-term borrowing during a 30 calendar-day period, assuming no rollover of debt that matures.

Derivatives

The company primarily enters into derivative contracts to hedge interest rate risk. The LCR Delegated Act requires that NCOs reflect outflows and inflows resulting from contractual settlements related to derivative transactions occurring over a 30 calendar-day period. In addition, the LCR Delegated Act requires that NCOs reflect certain contingent outflows related to a firm's derivative positions that may arise during a 30 calendar-day stress scenario, including collateral required as a result of market movements.

19.Cautionary Note on Forward-Looking Statements

We have included or incorporated by reference in these disclosures, and from time to time our management may make, statements that may constitute "forward-looking statements." Forward-looking statements are not historical facts, but instead represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside our control. These statements include statements other than historical information or statements of current condition.



It is possible that our actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Important factors that could cause our actual results and financial condition to differ from those indicated in the forward-looking statements include, among others, those discussed under "Risk Factors" in Part I, Item 1A in the firm's 2018 Form 10-K.