

# Registration Document

for retail and wholesale non-equity securities

dated 20 July 2023

of

**Goldman Sachs Bank Europe SE**

**Frankfurt am Main, Germany**

This document constitutes the registration document for retail non-equity securities (the "**Registration Document**") in relation to Goldman Sachs Bank Europe SE, Frankfurt am Main, Germany ("**GSBE**").

The Registration Document has been drawn up in accordance with Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 as amended from time to time (the "**Prospectus Regulation**") in conjunction with Article 7 and Article<sup>o</sup>8 (1) and Annex 6 of Commission Delegated Regulation (EU) 2019/980 of 14 March 2019 as amended from time to time (the "**Delegated Regulation**") and contains the information in relation to GSBE required by the Prospectus Regulation and the Delegated Regulation.

The Registration Document should be read together with all relevant supplements, potentially approved and published after the date of the Registration Document (see section "*Supplements*" below).

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## **A. RISK FACTORS RELATING TO GSBE**

*The risk factors listed below are divided into categories. Sections A.I. (Liquidity Risks), A.II. (Market Risks), A.III. (Credit Risks), A.IV. (Operational Risks), A.V. (Legal and Regulatory Risks), A.VI. (Competition Risks) and A.VII. (Market Developments and General Business Environment Risks) each form such a category. If more than one risk factor is included in a category, the most material risk factors shall be mentioned first. The materiality of the risk factors is based on the probability of their occurrence and the expected extent of their negative effects.*

*Only those risk factors are presented below which are specific to GSBE and, in the opinion of GSBE, material for taking an informed investment decision. In addition, before buying any securities, investors should carefully read and consider the risk factors described in the securities note for the relevant securities which, in the opinion of GSBE, are specific and material to such securities. In addition, they should note and consider all other information contained in the Registration Document, the relevant securities note or the relevant (base) prospectus and, if applicable, the relevant final terms and all relevant supplements and, if applicable, all information incorporated by reference in the relevant (base) prospectus or a relevant supplement. Potential investors should also bear in mind that all the risks described may interact and thereby reinforce each other. If any of the risks described in the following materialize, investors could lose some or all of their investment.*

### **I. LIQUIDITY RISKS**

In the category "Liquidity Risks", the risks are classified according to their materiality. The most material risks are mentioned first.

#### **1. Loss of deposits could increase GSBE's funding costs and adversely affect GSBE's liquidity and ability to grow GSBE's business.**

GSBE relies to a significant extent on deposits to be a low-cost and stable source of funding for the loans GSBE makes and the financial transactions in which GSBE engages. Certain deposit accounts do not have significant restrictions on withdrawal, and depositors can generally withdraw some or all of the funds in their accounts with little or no notice.

Furthermore, GSBE competes with banks and other financial services companies for deposits. Competitors have in the past and may in the future raise the rates they pay on deposits and GSBE has in the past and may in the future be required to raise its rates to avoid losing deposits.

If GSBE experiences significant withdrawals, for any reason, its funding costs may increase as GSBE may be required to rely on more expensive sources of funding. If GSBE is required to fund

its operations at a higher cost, these conditions may require GSBE to curtail its activities, which also could reduce its profitability.

**2. GSBE's businesses have been and may in the future be adversely affected by disruptions or lack of liquidity in the credit markets, including reduced access to credit and higher costs of obtaining credit.**

Widening credit spreads for GSBE or The Goldman Sachs Group, Inc. as well as significant declines in the availability of credit, have in the past adversely affected and may in the future affect GSBE's ability to borrow. GSBE obtains its funding primarily from Group Inc., which funds itself on an unsecured basis by issuing debt and a variety of financial instruments. GSBE seeks to finance a portion of its assets on a secured basis. Any disruptions in the credit markets may make it harder and more expensive to obtain funding for business. If GSBE's available funding is limited or GSBE is forced to fund operations at a higher cost, these conditions may require curtailment of business activities and increase the cost of funding, both of which could reduce profitability, particularly in GSBE's activities that involve lending and market making.

Clients engaging in mergers, acquisitions and other types of strategic transactions often rely on access to the secured and unsecured credit markets to finance their transactions. A lack of available credit or an increased cost of credit can adversely affect the size, volume and timing of clients' merger and acquisition transactions, particularly large transactions, and adversely affect GSBE's advisory and underwriting businesses.

**3. GSBE's liquidity, profitability and businesses may be adversely affected by an inability of GSBE's immediate parent, Goldman Sachs Bank USA and ultimate parent, The Goldman Sachs Group, Inc. to access the debt capital markets or to sell assets.**

Liquidity is essential to GSBE's businesses. It is of critical importance to GSBE, as most of the failures of financial institutions have occurred in large part due to insufficient liquidity. GSBE's liquidity may be impaired by an inability to access debt capital markets, an inability to obtain or maintain sufficient funding from The Goldman Sachs Group, Inc. (the "**Group Inc.**" and Group Inc. together with its consolidated subsidiaries, the "**GS Group**") or any of its subsidiaries, an inability to sell assets or redeem investments, lack of timely settlement of transactions, unusual deposit outflows or other unforeseen outflows of cash or collateral. This situation may arise due to circumstances that GSBE may be unable to control, such as a general market or economic disruption or an operational problem that affects third parties or GSBE or GS Group more broadly, or even by the perception among market participants that GSBE, or other market participants, are experiencing greater liquidity risk.

GSBE employs structured products to benefit its clients and hedge its own risks. The financial instruments that GSBE holds and the contracts to which it is a party are often complex, and these complex structured products often do not have readily available markets to access in times of liquidity stress. GSBE's financing and trading activities may lead to situations where the holdings

from these activities represent a significant portion of specific markets, which could restrict liquidity for GSBE's positions.

Further, GSBE's ability to sell assets may be impaired if there is not generally a liquid market for such assets, as well as in circumstances where other market participants are seeking to sell similar otherwise generally liquid assets at the same time, as is likely to occur in a liquidity or other market crisis or in response to changes to rules or regulations. In addition, clearing systems, exchanges and other financial institutions with which GSBE interacts may exercise set-off rights or the right to require additional collateral, including in difficult market conditions, which could further impair GSBE's liquidity.

Numerous regulations have been adopted that impose more stringent liquidity requirements on large financial institutions, such as GSBE, Goldman Sachs Bank USA, GSBE's direct parent company ("**GS Bank USA**"), or Group Inc. These regulations require GSBE to hold large amounts of highly liquid assets and reduce GSBE's flexibility to source and deploy funding.

**4. Reductions in the credit ratings or an increase in the credit spreads of GSBE or its immediate parent, GS Bank USA or the ultimate parent, or the ultimate parent, Group Inc., may adversely affect GSBE's liquidity and cost of funding.**

GSBE is an indirect, wholly-owned operating subsidiary of Group Inc, and depends on Group Inc. for capital and funding. The credit ratings of GSBE and those of Group Inc. are important to GSBE's liquidity. A reduction in GSBE's and/or Group Inc's credit ratings could adversely affect GSBE's liquidity and competitive position, increase its borrowing costs (including borrowing from GSBE's affiliates), limit its access to the capital markets or funding from Group Inc. or trigger its obligations under certain provisions in some trading and collateralised financing contracts. Under these provisions, counterparties could be permitted to terminate contracts with GSBE or Group Inc. or require additional collateral or make termination payments. Termination of trading and collateralised financing contracts could cause GSBE to sustain losses and impair its liquidity by requiring Group Inc. or GSBE to find other sources of financing or to make significant cash payments or securities movements.

A downgrade by any one rating agency, depending on the agency's relative ratings of GSBE or Group Inc. at the time of the downgrade, may have an impact which is comparable to the impact of a downgrade by all rating agencies. A reduction in Group Inc.'s credit ratings could in theory adversely affect GSBE's liquidity and competitive position, increase borrowing costs, limit access to the capital markets or funding from Group Inc.

GSBE's and Group Inc.'s cost of obtaining long-term unsecured funding is directly related to both the credit spreads (the amount in excess of the interest rate of benchmark securities that GSBE needs to pay) of GSBE and Group Inc.'s. Increases in the credit spreads of GSBE and/or Group Inc. can significantly increase the cost of this funding. Changes in credit spreads are continuous,

market-driven, and subject at times to unpredictable and highly volatile movements. The credit spreads of GSBE and/or Group Inc. are also influenced by market perceptions of GSBE's and/or Group Inc.'s creditworthiness and movements in the costs to purchasers of credit default swaps referenced to Group Inc.'s long-term debt. The market for credit default swaps has proven to be extremely volatile and at times has lacked a high degree of transparency or liquidity. Increases in Group Inc.'s credit spreads and negative market perceptions of Group Inc.'s creditworthiness could also impact GSBE's ability to obtain long-term unsecured funding, and Group Inc.'s inability to obtain long-term unsecured funding could negatively impact GSBE's operations.

## II. MARKET RISKS

In the category "Market Risks", the risks are classified according to their materiality. The most material risks are mentioned first.

### **1. GSBE's businesses have been and may in the future be adversely affected by conditions in the global financial markets and broader economic conditions.**

Certain of GSBE's businesses, by its nature, do not produce predictable earnings. GSBE generates among others revenue and earnings from transactions in financial instruments, market-making activities in interest rate and other derivatives and related products, and interest GSBE may charge due to lending activities.

GSBE's financial performance is highly dependent on the environment in which it operates. A favourable business environment is generally characterised by, among other factors, high global gross domestic product growth, regulatory and market conditions that result in transparent, liquid and efficient capital markets, low inflation, business, consumer and investor confidence, stable geopolitical conditions and strong business earnings.

Unfavourable or uncertain economic and market conditions can be caused by: low levels of or declines in economic growth, business activity or investor, business or consumer confidence; concerns over a potential recession; changes in consumer spending or borrowing patterns; pandemics; limitations on the availability or increases in the cost of credit and capital; illiquid markets; increases in inflation, interest rates, exchange rate or basic commodity price volatility or default rates; high levels of inflation or stagflation; concerns about sovereign defaults; uncertainty concerning fiscal or monetary policy, government shutdowns, debt ceilings or funding; the extent of and uncertainty about potential increases in tax rates and other regulatory changes; limitations on international trade and travel; laws and regulations that limit trading in, or the issuance of, securities of issuers outside their domestic markets; outbreaks of domestic or international tensions or hostilities, terrorism, nuclear proliferation, cybersecurity threats or attacks and other forms of disruption to or curtailment of global communication, energy transmission or transportation networks or other geopolitical instability or uncertainty; corporate, political or other scandals that reduce investor confidence in capital markets; extreme weather events or other natural disasters; or a combination of these or other factors.

The financial services industry and the securities and other financial markets have been materially and adversely affected in the past by significant declines in the values of nearly all asset classes, by a serious lack of liquidity and by high levels of borrower defaults. In addition, concerns about actual or potential increases in interest rates, inflation and other borrowing costs, a resurgence of COVID-19 cases, European sovereign debt risk and its impact on the European banking system and limitations on international trade have, at times, negatively impacted the levels of client

activity. Actual changes in interest rates and other market conditions, have also resulted, at times, in significant volatility and negative impact to client activity levels and creditworthiness.

General uncertainty about economic, political and market activities, and the scope, timing and impact of regulatory reform, as well as weak consumer, investor and chief executive officer ("CEO") confidence resulting in large part from such uncertainty, has in the past negatively impacted the client activity of GS Group's or GSBE's clients, which can adversely affect GSBE's businesses. Periods of low volatility and periods of high volatility combined with a lack of liquidity, have at times had an unfavourable impact on GSBE's market-making business.

Financial institution returns in general and also GSBE's returns may be negatively impacted by increased funding costs due in part to the lack of perceived government support of such institutions in the event of future financial crises relative to financial institutions in countries in which governmental support is maintained. In addition, liquidity in the financial markets has in the past been, and could in the future be, negatively impacted as market participants and market practices and structures adjust to evolving regulatory frameworks.

In addition, a significant portion of GSBE's businesses involves transactions with, through, arising from, involving, or otherwise related to other GS Group entities, and any adverse change in the businesses or activity levels of GS Group more broadly can have an adverse impact on GSBE. Accordingly, GSBE is materially affected by conditions in the global financial markets and economic conditions generally, both directly through their impact on GSBE's business levels and indirectly through their impact on the business levels of GSBE's affiliates. These conditions can change suddenly and negatively.

**2. GSBE's businesses have been and may in the future be adversely affected by declining asset values, particularly where GSBE has net "long" positions, or receives or posts collateral.**

GSBE may have net "long" positions in debt securities, loans, derivatives, mortgages, equities (including private equity) and most other asset classes. These include positions GSBE takes when committing capital to its clients as part of its financing activities or when GSBE acts as a principal to facilitate the activities of its clients or counterparties (including its affiliates) through GSBE's market-making activities, or commits large amounts of capital to maintain positions in interest rate and credit products, as well as through currencies, commodities, equities and mortgage-related activities. Because GSBE's market-making positions are marked-to-market on a daily or other periodic basis, declines in asset values directly and promptly impact its earnings, unless GSBE has effectively "hedged" its exposures to those declines.

In certain circumstances (particularly in the case of credit products and private equities or other securities that are not freely tradable or lack established and liquid trading markets), it may not be possible or economic to hedge GSBE's exposures and to the extent that this is done the hedge may



be ineffective or may greatly reduce GSBE's ability to profit from increases in the values of the assets. Sudden declines and significant volatility in the prices of assets have in the past substantially curtailed or eliminated, and may in the future substantially curtail or eliminate the trading markets for certain assets, which may make it difficult to sell, hedge or value such assets. GSBE may incur losses from time to time as trading markets deteriorate or cease to function, including with respect to securities offerings GSBE has underwritten. The inability to sell or effectively hedge assets reduces GSBE's ability to limit losses in such positions and the difficulty in valuing assets has in the past negatively affected, and may in the future negatively affect its capital, liquidity or leverage ratios, its funding costs and its ability to deploy capital.

In connection with GSBE's market-making activities, GSBE obligated by the rules of relevant trading venues to provide executable quotes to maintain an orderly market. This may result in an increased need for liquidity and corresponding risk for GSBE to manage. Risk, including market risk, may expose GSBE to gains or losses.

Collateral is posted to support obligations of GSBE and received to support the obligations of clients and counterparties. When the value of the assets posted as collateral or the credit ratings of the party posting collateral decline, the party posting the collateral may need to provide additional collateral or, if possible, reduce its position. Therefore, declines in the value of asset classes used as collateral mean that either the cost of funding positions is increased or the size of positions is decreased.

If GSBE is the party providing collateral, this can increase costs and reduce profitability and if GSBE is the party receiving collateral, this can also reduce profitability by reducing the level of business done with clients and counterparties. GSBE indemnifies all of its securities lending customers against losses incurred in the event that borrowers do not return securities and the collateral held is insufficient to cover the market value of the securities borrowed, and, therefore, declines in the value of collateral can subject GSBE to additional costs. In addition, volatile or less liquid markets increase the difficulty of valuing assets which can lead to costly and time-consuming disputes over asset values and the level of required collateral, as well as increased credit risk to the recipient of the collateral due to delays in receiving adequate collateral.

In cases where GSBE forecloses on collateral, sudden declines in the value or liquidity of the collateral have in the past resulted in and may in the future, despite credit monitoring, over-collateralisation, the ability to call for additional collateral or the ability to force repayment of the underlying obligation, result in significant losses to GSBE, especially where there is a single type of collateral supporting the obligation.

Any of the foregoing factors may lead to significant losses of GSBE and may have an adverse effect on GSBE's results of operations.

**3. GSBE's market-making activities have been and may in the future be affected by changes in the levels of market volatility.**

Certain of GSBE's market-making activities depend on market volatility to provide trading and arbitrage opportunities to GSBE's clients, and decreases in volatility have reduced and may in the future reduce these opportunities and the level of client activity associated with them and adversely affect the results of these activities, which could adversely impact GSBE's revenues. Increased volatility, while it can increase trading volumes and spreads, also increases risk as measured by Value-at-Risk ("VaR") and may expose GSBE to increased risks in connection with its market-making activities or may cause GSBE to reduce its inventory in order to avoid increasing GSBE's VaR. Limiting the size of GSBE's market-making positions can adversely affect GSBE's profitability. In periods when volatility is increasing, but asset values are declining significantly, it may not be possible to sell assets at all or it may only be possible to do so at steep discounts. In those circumstances GSBE has been and may in the future be forced to either take on additional risk or to realize losses in order to decrease its VaR. In addition, increases in volatility increase the level of GSBE's risk-weighted assets ("RWAs"), which increases GSBE's capital requirements.

**4. GSBE's investment banking and investment management businesses have been adversely affected and may in the future be adversely affected by market uncertainty or lack of confidence among investors and CEOs due to declines in economic activity and other unfavorable economic, geopolitical or market conditions.**

GSBE's investment banking business has been and may in the future be adversely affected by market conditions. Poor economic conditions and other uncertain geopolitical conditions may adversely affect and have in the past adversely affected investor and CEO confidence, resulting in significant industry-wide declines in the size and number of underwritings and of advisory transactions, which would likely have an adverse effect on GSBE's revenues and its profit margins. In particular, because a significant portion of GSBE's investment banking revenues are derived from its participation in large transactions, a decline in the number of large transactions may adversely affect GSBE's investment banking business.

Market uncertainty, volatility and adverse economic conditions, as well as declines in asset values, may cause GSBE's clients to transfer their assets out of its funds or other products or their brokerage accounts and result in reduced net revenues, principally in GSBE's asset management and wealth management businesses. Even if clients do not withdraw their funds, they may invest them in products that generate less fee income.

**5. GSBE's investment management business has been and may in the future be adversely affected by the poor investment performance of its investment products or a client preference for products other than those which GSBE offers or for products that generate lower fees.**

Poor investment returns in GSBE's investment management businesses, due to either general market conditions or underperformance (relative to GSBE's competitors or to benchmarks) by funds or accounts that GSBE manages or investment products that GSBE may design or sell, affect its ability to retain existing assets and to attract new clients or additional assets from existing clients. This could affect the management and incentive fees that GSBE earns on assets under supervision ("AUS") or the commissions and net spreads that GSBE earns for selling other investment products, such as structured notes or derivatives. To the extent that GSBE's clients choose to invest in products that GSBE does not currently offer, GSBE will suffer outflows and a loss of management fees. Further, if, due to changes in investor sentiment or the relative performance of certain asset classes or otherwise, clients continue to invest in products that generate lower fees (e.g., passively managed or fixed income products), GSBE's average effective management fee could decline and its investment management businesses could be adversely affected.

**6. Changes in market interest rates could adversely affect GSBE's revenues and expenses, the value of assets and obligations, and the availability and cost of funding.**

GSBE has exposure to market interest rate movements, among others in connection with lending and deposit taking activities and pension risk liabilities. In addition to the impact on the general economy, changes in interest rates could directly impact GSBE in one or more of the following ways:

- The yield on interest-earning assets, primarily on GSBE's loan portfolio, and rates paid on interest-bearing liabilities, primarily GSBE's deposit-taking activities, may change in disproportionate ways;
- The value of certain balance sheet and off-balance sheet financial instruments that GSBE holds could decline; or
- The cost of funding from affiliates or third parties may increase and the ability to raise funding could become more difficult.

GSBE's profitability in part results from GSBE's net interest income, which is the difference between the interest income GSBE earns on its interest-earning assets, such as loans and securities, and GSBE's interest expense on interest-bearing liabilities, such as deposits and borrowed funds. Accordingly, GSBE's results of operations is impacted by movements in market interest rates and GSBE's ability to manage its interest-rate-sensitive assets and liabilities in response to these movements. Factors such as inflation, recession and instability in financial markets, among other factors beyond GSBE's control, may affect interest rates.

Any substantial, unexpected, prolonged change in market interest rates could have a meaningful adverse effect on GSBE's financial condition, liquidity and results of operations. Changes in the level of interest rates also have in the past negatively affected and may in the future negatively affect GSBE's ability to originate loans, the value of GSBE's assets and GSBE's ability to realize gains from the sale of GSBE's assets, all of which ultimately affect GSBE's earnings.

### III. CREDIT RISKS

In the category "Credit Risks", the risks are classified according to their materiality. The most material risks are mentioned first.

#### **1. GSBE's businesses, profitability and liquidity may be adversely affected by deterioration in the credit quality of or defaults by third parties.**

A number of GSBE's products and activities expose GSBE to credit risk, including loans, lending commitments, derivatives and securities financing transactions. GSBE is exposed to the risk that third parties who owe money, securities or other assets will not perform their obligations. These parties may default on their obligations to GSBE due to bankruptcy, lack of liquidity, operational failure or other reasons. The provision of payment services in GSBE's transaction banking business may expose GSBE to intraday liquidity and credit risks, to the extent GSBE's clients and affiliates experience delays in making payments, or are unable to repay amounts that are extended in the normal course of business. A failure of a significant market participant, or even concerns about a default by such an institution, could lead to significant liquidity problems, losses or defaults by other institutions, which in turn could adversely affect GSBE.

GSBE is also subject to the risk that its rights against third parties may not be enforceable in all circumstances. In addition, deterioration in the credit quality of third parties whose securities or obligations are held by GSBE including a deterioration in the value of collateral posted by third parties to secure their obligations to GSBE under derivatives contracts, loan agreements and securities financing transactions, could result in losses and / or adversely affect GSBE's ability to rehypothecate or otherwise use those securities or obligations for liquidity purposes.

A significant downgrade in the credit ratings of GSBE's counterparties could also have a negative impact on GSBE's results. While in many cases GSBE is permitted to require additional collateral from counterparties that experience financial difficulty, disputes may arise as to the amount of collateral GSBE is entitled to receive and the value of pledged assets. The termination of contracts and the foreclosure on collateral may subject GSBE to claims for the improper exercise of its rights, including that the foreclosure was not permitted under the legal documents, was conducted in an improper manner or caused a client or counterparty to go out of business. Default rates, downgrades and disputes with counterparties as to the valuation of collateral typically increase significantly in times of market stress, increased volatility and illiquidity.

GSBE relies on information furnished by or on behalf of clients and counterparties in deciding whether to extend credit or enter into other transactions. This information could include financial statements, credit reports and other financial information. GSBE also relies on representations of those clients, counterparties or other third parties, such as independent auditors, as to the accuracy and completeness of that information. Reliance on inaccurate or misleading financial statements,

credit reports or other financial information could have a material adverse impact on GSBE's businesses, financial condition and results of operations.

Although GSBE has limits and regularly reviews credit exposures to specific clients and counterparties and to specific industries, countries and regions that GSBE believes may present credit concerns, default risk may arise from events or circumstances that are difficult to detect or foresee.

## **2. Concentration of risk increases the potential for significant losses in GSBE's lending, market-making, underwriting and other activities.**

Concentration of risk increases the potential for significant losses in GSBE's lending, market-making, underwriting and other activities. The number and size of these transactions may affect GSBE's results of operations in a given period. In particular, GSBE extends large commitments as part of GSBE's lending activities. Moreover, because of concentrated risk, GSBE may suffer losses even when economic and market conditions are generally favourable for competitors. Disruptions in the credit markets can make it difficult to hedge these credit exposures effectively or economically. Disruptions in the credit markets have in the past substantially curtailed or eliminated, and may in the future substantially curtail or eliminate, the trading markets for loans GSBE originates. These disruptions may make it difficult for GSBE to sell or value such assets, which may result in losses for GSBE from time to time.

In the ordinary course of business, GSBE may be subject to a concentration of credit risk to a particular counterparty (e.g. an OTC derivatives counterparty), borrower, issuer (including sovereign issuers) clearinghouse or exchange, geographic area or group of related countries and a failure or downgrade of, or default by, an entity to which GSBE has a concentration of credit risk could negatively impact GSBE's businesses, perhaps materially and the systems by which GSBE sets limits and monitors the level of its credit exposure to individual entities, industries, countries and regions may not function as anticipated. Regulatory reforms, including the European Market Infrastructure Regulation, have led to increased centralisation of trading activity through particular clearinghouses, central agents or exchanges, which has significantly increased GSBE's concentration of risk with respect to these entities.

While GSBE's activities expose it to many different industries, counterparties and countries, GSBE routinely executes a high volume of transactions with counterparties engaged in financial services activities, including brokers and dealers, commercial and central banks, clearinghouses, exchanges and investment funds. This has resulted in significant credit concentration with respect to these counterparties which increases the potential for significant losses in market-making and underwriting activities.

### **3. Derivative transactions and delayed documentation or settlements may expose GSBE to credit risk, unexpected risks and potential losses.**

GSBE is party to a large number of derivative transactions, including interest rate, currency, credit and other derivatives. Many of these derivative instruments are individually negotiated and non-standardised, which can make exiting, transferring or settling positions difficult. Many credit derivatives require that GSBE deliver to the counterparty the underlying security, loan or other obligation in order to receive payment. In a number of cases, GSBE does not hold the underlying security, loan or other obligation and may not be able to obtain the underlying security, loan or other obligation. This could cause GSBE to forfeit the payments due under these contracts or result in settlement delays with the attendant credit and operational risk as well as increased costs to GSBE.

Derivative transactions also involve the risk that documentation has not been properly executed, that executed agreements may not be enforceable against the counterparty, or that obligations under such agreements may not be able to be “netted” against other obligations with such counterparty. In addition, counterparties may claim that such transactions were not appropriate or authorised.

As a signatory to the International Swaps and Derivatives Association Universal Resolution Stay Protocol (the "**ISDA Universal Protocol**") and the International Swaps and Derivatives Association 2018 U.S. Resolution Stay Protocol (collectively, the "**ISDA Protocols**") and being subject to various regulatory requirements, GSBE may not be able to exercise termination rights and other remedies against counterparties and, as this regime has not yet been tested, GSBE may suffer risks or losses that it would not have expected to suffer if it could immediately close out transactions upon a termination event. The impact of the ISDA Protocols and these rules and regulations extend to repurchase agreements and other instruments that are not derivative contracts.

Derivative contracts and other transactions including secondary bank loan purchases and sales, entered into with third parties are not always confirmed by the counterparties or settled on a timely basis. While the transaction remains unconfirmed or during any delay in settlement, GSBE is subject to heightened credit and operational risk and in the event of a default may find it more difficult to enforce its rights.

In addition, as new complex derivative products are created, covering a wider array of underlying credit and other instruments, disputes about the terms of the underlying contracts could arise, which could impair GSBE's ability to effectively manage its risk exposures from these products and subject it to increased costs. Central clearing of credit derivatives and other over-the-counter derivatives, or a market shift toward standardised derivatives, could reduce the risk associated with these transactions, but under certain circumstances could also limit GSBE's ability to develop

derivatives that best suit the needs of clients and to hedge its own risks, and could adversely affect GSBE's profitability. In addition, these provisions have increased credit exposure to central clearing platforms.

**4. GSBE might underestimate the credit losses inherent in its loan portfolio and have credit losses in excess of the amount reserved.**

The credit quality of GSBE's loan portfolio can have a significant impact on its earnings. Through the process of estimating credit losses over the life of its loans, GSBE might underestimate the credit losses inherent in its loan portfolio and have credit losses in excess of the amount reserved. While GSBE management uses the best information available to determine this estimate, it has made and may make future adjustments to the allowance based on, among other things, changes in the economic environment, the quality of the loan portfolio or the values of the underlying collateral.



#### IV. OPERATIONAL RISKS

In the category "Operational Risks", the risks are classified according to their materiality. The most material risks are mentioned first.

**1. A failure in GSBE's operational systems as well as human error, malfeasance or other misconduct, could impair its liquidity, disrupt its businesses, result in the disclosure of confidential information, damage its reputation and cause losses.**

GSBE's businesses are highly dependent on its ability to process and monitor, on a daily basis, a very large number of transactions, many of which are highly complex and occur at high volumes and frequencies, across numerous and diverse markets in many currencies. These transactions, as well as the information technology services provided to clients, often must adhere to client-specific guidelines, as well as legal and regulatory standards.

Many rules and regulations worldwide govern GSBE's obligations to execute transactions and report such transactions and other information to regulators, exchanges and investors. Compliance with these legal and reporting requirements can be challenging, and GSBE has been and may in the future be subject to regulatory fines and penalties for failing to follow these rules or to report timely, accurate and complete information in accordance with these rules. As reporting requirements expand, compliance with these rules and regulations has become more challenging.

As GSBE's client base and geographical reach expands and the volume, speed, frequency and complexity of transactions, especially electronic transactions (as well as the requirements to report such transactions on a real-time basis to clients, regulators and exchanges) increase, developing and maintaining GSBE's operational systems and infrastructure has become more challenging, and the risk of systems or human error in connection with such transactions has increased, as have the potential consequences of such errors due to the speed and volume of transactions involved and the potential difficulty associated with discovering errors quickly enough to limit the resulting consequences. These risks are exacerbated in times of increased volatility.

GSBE's financial, accounting, data processing or other operational systems and facilities may fail to operate properly or become disabled as a result of events that are wholly or partially beyond GSBE's control, such as a spike in transaction volume, adversely affecting GSBE's ability to process transactions or provide certain services. GSBE must continuously update these systems to support its operations and growth and to respond to changes in regulations and markets, and invest heavily in systemic controls and training to pursue GSBE's objective of ensuring that such transactions do not violate applicable rules and regulations or, due to errors in processing such transactions, adversely affect markets, GSBE's clients and counterparties or GSBE. Enhancements and updates to systems, as well as the requisite training, including in connection with the integration of new businesses, entail significant costs and create risks associated with implementing new systems and integrating them with existing ones.

The use of computing devices and phones is critical to the work done by GSBE's employees and the operation of GSBE's systems and businesses and those of its clients and third-party service providers and vendors. Their importance has continued to increase, in particular in light of work-from-home arrangements. Computers and computer networks are subject to various risks, including, among others, cyber-attacks, inherent technological defects, system failures and human error. For example, fundamental security flaws in computer chips found in many types of these computing devices and phones have been reported in the past and may occur in the future. The use of personal devices by GSBE's employees or by GSBE's vendors for work-related activities also presents risks related to potential violations of record retention and other requirements. Cloud technologies are also critical to the operation of GSBE's systems and platforms and GSBE's reliance on cloud technologies is growing. Service disruptions may lead to delays in accessing, or the loss of, data that is important to GSBE's businesses and may hinder GSBE's clients' access to GSBE's platforms. Addressing these and similar issues could be costly and affect the performance of these businesses and systems. Operational risks may be incurred in implementing fixes and even after the fix is implemented there may still be residual security risks.

Notwithstanding the proliferation of technology and technology-based risk and control systems, GSBE's businesses ultimately rely on people as its greatest resource, and, from time to time, they may make mistakes or engage in violations of applicable policies, laws, rules or procedures that are not always caught immediately by GSBE's technological processes or by GSBE's controls and other procedures, which are intended to prevent and detect such errors or violations. These may include calculation errors, mistakes in addressing emails, errors in software or model development or implementation, or simple errors in judgment, as well as intentional efforts to ignore or circumvent applicable policies, laws, rules or procedures. Human errors, malfeasance and other misconduct, including the intentional misuse of client information in connection with insider trading or for other purposes, even if promptly discovered and remediated, can result in reputational damage and material losses and liabilities for GSBE.

**2. A failure or disruption in the bank's infrastructure, or in the operational systems or infrastructure of third parties or those of GS Group affiliates', could impair the GSBE's liquidity, disrupt its businesses, damage its reputation and cause losses.**

GSBE faces the risk of operational failure or significant operational delay, termination or capacity constraints of any of the clearing agents, exchanges, clearinghouses or other financial intermediaries that it uses to facilitate securities and derivatives transactions and transaction banking activities, and as interconnectivity with clients grows, GSBE will increasingly face the risk of operational failure or significant operational delay with respect to clients' systems.

There has been significant consolidation among clearing agents, exchanges and clearinghouses and an increasing number of derivative transactions are cleared on exchanges, which has increased GSBE's exposure to operational failure or significant operational delay, termination or capacity

constraints of the particular financial intermediaries that GSBE uses and could affect GSBE's ability to find adequate and cost-effective alternatives in the event of any such failure, delay, termination or constraint. Industry consolidation, whether among market participants or financial intermediaries, increases the risk of operational failure or significant operational delay as disparate complex systems need to be integrated, often on an accelerated basis.

The interconnectivity of multiple financial institutions with central agents, exchanges and clearinghouses, and the increased centrality of these entities, increases the risk that an operational failure at one institution or entity may cause an industry-wide operational failure that could materially impact GSBE's ability to conduct business. Interconnectivity of financial institutions with other companies through, among other things, application programming interfaces or APIs presents similar risks. Any such failure, termination or constraint could adversely affect GSBE's ability to effect transactions, service GSBE's clients, manage GSBE's exposure to risk or expand GSBE's businesses or result in financial loss or liability to GSBE's clients, impairment of GSBE's liquidity, disruption of its businesses, regulatory intervention or reputational damage.

GSBE also relies on third-party vendors and is ultimately responsible for activities conducted by any third-party service provider and adverse regulatory consequences. Although GSBE takes actions to manage the risks associated with activities conducted through third-party relationships, any problems caused by a third-party service provider could adversely affect GSBE's ability to deliver products and services to GSBE's customers and to conduct its businesses.

Despite GSBE's and GS Group's resiliency plans and facilities, GSBE's ability to conduct business may be adversely impacted by a disruption in the infrastructure that supports its businesses and the communities where GSBE is located. This may include a disruption involving electrical, satellite, undersea cable or other communications, internet, transportation or other facilities used by GSBE, its employees or third parties with which GSBE conducts business, including cloud service providers. These disruptions may occur as a result of events that affect only GSBE's buildings or systems or those of such third parties, or as a result of events with a broader impact globally, regionally or in the cities where those buildings or systems are located, including, but not limited to, natural disasters, war, civil unrest, terrorism, economic or political developments, pandemics and weather events.

In addition, although GSBE seeks to diversify its third-party vendors to increase its resiliency, GSBE is exposed to risks if GSBE's vendors operate in the same area and is also exposed to the risk that a disruption or other information technology event at a common service provider to GSBE's vendors could impede their ability to provide products or services to GSBE. GSBE may not be able to effectively monitor or mitigate operational risks relating to its vendors' use of common service providers.

Additionally, although the prevalence and scope of applications of distributed ledger technology, cryptocurrency and similar technologies is growing, the technology is nascent and may be vulnerable to cyber attacks or have other inherent weaknesses that may or may not have been identified, such as the risk that underlying encryption measures may be defeated. GSBE is exposed to risks, and may become exposed to additional risks, related to distributed ledger technology, including through the receipt of cryptocurrencies or other digital assets as collateral. GSBE may be, or may become, exposed to technological, legal, regulatory, third-party and other risks related to distributed ledger technology, including through GS Group's facilitation of clients' activities involving financial products that use distributed ledger technology, such as blockchain, cryptocurrencies or other digital assets, and the use of distributed ledger technology in GS Group's systems, as well as by third-party vendors, clients, counterparties, clearinghouses and other financial intermediaries and the receipt of cryptocurrencies or other digital assets as collateral. The market volatility that financial products using distributed ledger technology have recently experienced may increase these risks.

**3. A failure to protect GSBE's computer systems, networks and information, and its clients' information, against cyber attacks and similar threats could impair its ability to conduct its businesses, result in the disclosure, theft or destruction of confidential information, damage its reputation and cause losses.**

GSBE's operations rely on the secure processing, storage and transmission of confidential and other information in GS Group's computer systems and networks and those of its vendors, and GSBE's technology risk function uses and benefits from the processes and resources of the GS Group technology risk function. There have been a number of highly publicized cases involving financial services companies, consumer-based companies, software and information technology service providers, governmental agencies and other organisations reporting the unauthorised access on disclosure of client, customer or other confidential information in recent years, as well as cyber-attacks involving the dissemination, theft and destruction of corporate information or other assets, as a result of inadequate procedures or the failure to follow procedures by employees or contractors or as a result of actions by third parties, including actions by foreign governments. There have also been several highly publicized cases where hackers have requested "ransom" payments in exchange for not disclosing customer information or for restoring access to information or systems.

GSBE and its affiliates are regularly the targets of attempted cyber-attacks, including denial-of-service attacks, and must continuously monitor and develop systems to protect the integrity and functionality of its technology infrastructure and access to and the security of its data. GSBE and its affiliates may face an high volume of attempted cyber-attacks as GSBE and its affiliates expand its mobile and other internet-based products and services. The migration of GSBE's communication from devices GSBE provides to employee-owned devices presents additional risks of cyber-attacks, as do work-from-home arrangements. In addition, due to the interconnectivity with other GS Group entities third-party vendors (and their respective service providers), central

agents, exchanges, clearinghouses and other financial institutions, GSBE could be adversely impacted if any of them is subject to a successful cyber-attack or other information security event. These impacts could include the loss of access to information or services from the third party subject to the cyber-attack or other information security event or could result in unauthorized access to or disclosure of client, customer or other confidential information, which could, in turn, interrupt GSBE's business or adversely affect its results of operations and reputation.

Despite GSBE's efforts to ensure the integrity of its systems and information, GSBE and its affiliates may not be able to anticipate, detect or implement effective preventive measures against all cyber threats, including because the techniques used are increasingly sophisticated, change frequently and are often not recognised until launched. Cyber-attacks can originate from a variety of sources, including third parties who are affiliated with or sponsored by foreign governments or are involved with organised crime or terrorist organisations. Third parties may also attempt to place individuals within GS Group or induce employees, clients or other users of GS Group's systems to disclose sensitive information or provide access to GS Group's data or that of its clients, and these types of risks may be difficult to detect or prevent.

Although GSBE and GS Group take protective measures proactively and endeavour to modify them as circumstances warrant, its and GS Group's computer systems, software and networks may be vulnerable to unauthorised access, misuse, computer viruses or other malicious code, cyber-attacks on GSBE's vendors and other events that could have a security impact. Risks relating to cyber-attacks on GSBE's vendors have been increasing given the greater frequency and severity in recent years of supply chain attacks affecting software and information technology service providers. Due to the complexity and interconnectedness of GS Group's systems, the process of enhancing GS Group's protective measures can itself create a risk of systems disruptions and security issues. In addition, protective measures that GS Group's employs to compartmentalise its data may reduce its visibility into, and adversely affect its ability to respond to, cyber threats and issues with its systems.

If one or more of these types of events occur, it potentially could jeopardise GS Group's, its clients', counterparties' or third parties' confidential and other information processed, stored in or transmitted through GS Group's computer systems and networks, or otherwise cause interruptions or malfunctions in GSBE's operations or those of its clients', its counterparties' or third parties', which could impact their ability to transact with GSBE or otherwise result in legal or regulatory action, significant losses or reputational damage. In addition, such an event could persist for an extended period of time before being properly detected or escalated, and, following detection or escalation, it could take considerable time for GSBE to obtain full and reliable information about the extent, amount and type of information compromised. During the course of an investigation, GSBE may not know the full impact of the event and how to remediate it, and actions, decisions and mistakes that are taken or made may further increase the negative effects of the event on GSBE's businesses, results of operations and reputation. Moreover, potential new regulations may

require Group Inc. to disclose information about a material cybersecurity incident before it has been resolved or fully investigated.

GS Group has expended, and expects to continue to expend, significant resources on an ongoing basis to modify its protective measures and to investigate and remediate vulnerabilities or other exposures, but these measures may be ineffective and GS Group, including GSBE, may be subject to legal or regulatory action, as well as financial losses that are either not insured against or not fully covered through any insurance it maintains.

GSBE's confidential information may also be at risk from the compromise of clients' personal electronic devices or as a result of a data security breach at an unrelated company. Losses due to unauthorised account activity could harm GSBE's reputation and may have adverse effects on its business, financial condition and results of operations.

The increased use of mobile and cloud technologies can heighten these and other operational risks, as can work-from-home arrangements. Certain aspects of the security of such technologies are unpredictable or beyond GS Group's control, and the failure by mobile technology and cloud service providers to adequately safeguard their systems and prevent cyber-attacks could disrupt GS Group's operations and result in misappropriation, corruption or loss of confidential and other information. In addition, there is a risk that encryption and other protective measures, despite their sophistication, may be defeated, particularly to the extent that new computing technologies vastly increase the speed and computing power available.

GSBE routinely transmits and receives personal, confidential and proprietary information by email and other electronic means. GSBE has discussed and worked with clients, vendors, service providers, counterparties and other third parties to develop secure transmission capabilities and protect against cyber-attacks, but it does not have, and may be unable to put in place, secure capabilities with all of its clients, vendors, service providers, counterparties and other third parties and it may not be able to ensure that these third parties have appropriate controls in place to protect the confidentiality of the information. An interception, misuse or mishandling of personal, confidential or proprietary information being sent to or received from a client, vendor, service provider, counterparty or other third party could result in legal liability, regulatory action and reputational harm.

#### **4. GSBE may incur losses as a result of ineffective risk management processes and strategies.**

GSBE seeks to monitor and control its risk exposure through a risk and control framework encompassing a variety of separate, but complementary financial, credit, operational, compliance and legal reporting systems, internal controls, management review processes and other mechanisms that cover risks associated with GSBE's own activities, as well as activities conducted through third-party relationships. In doing so, GSBE uses and benefits from the risk management

processes of GS Group. GSBE's risk management process seeks to balance its ability to profit from market-making, lending or other positions with its exposure to potential losses. Whilst GSBE employs a broad and diversified set of risk monitoring and risk mitigation techniques, those techniques and the judgments that accompany their application cannot anticipate every economic and financial outcome or the specifics and timing of such outcomes. Thus, in the course of its activities, GSBE has incurred and may in the future incur losses. Market conditions in recent years have involved unprecedented dislocations and highlight the limitations inherent in using historical data to manage risk.

The models that GSBE uses to assess and control its risk exposures reflect assumptions about the degrees of correlation or lack thereof among prices of various asset classes or other market indicators. In times of market stress or other unforeseen circumstances previously uncorrelated indicators may become correlated, or conversely previously correlated indicators may move in different directions. These types of market movements have at times limited the effectiveness of GSBE's hedging strategies and have caused it to incur significant losses, and they may do so in the future. These changes in correlation have been and may in the future be exacerbated where other market participants are using models with assumptions or algorithms that are similar to GSBE's. In these and other cases, it may be difficult to reduce GSBE's risk positions due to the activity of other market participants or widespread market dislocations, including circumstances where asset values are declining significantly or no market exists for certain assets.

In addition, the use of models in connection with risk management and numerous other critical activities presents risks that the models may be ineffective, either because of poor design, ineffective testing or improper or flawed inputs, as well as unpermitted access to the models resulting in unapproved or malicious changes to the model or its inputs.

To the extent that GSBE has positions through its lending, market-making or other activities or it makes investments directly through its investing activities, including private equity, that do not have an established liquid trading market or are otherwise subject to restrictions on sale or hedging, GSBE may not be able to reduce its positions and therefore reduce its risk associated with those positions.

Prudent risk management, as well as regulatory restrictions, may cause GSBE to limit its exposure to counterparties, geographic areas or markets, which may limit its business opportunities and increase the cost of funding or hedging activities.

Thus, as a consequence of an inadequacy or lapse of GSBE's risk management framework, it may, in the course of its activities, incur losses and its financial condition or results of operations could be materially and adversely affected.

## **5. GSBE is reliant on Group Inc. and other of its affiliates for certain client business, various services, liquidity and capital.**

GSBE is an indirect wholly-owned subsidiary of Group Inc. As an indirect wholly-owned subsidiary, GSBE relies on various business relationships of Group Inc. and its affiliates generally, including the ability to receive various services, as well as, in part, the capital and liquidity of GSBE's parent, Group Inc., as well as the liquidity of Goldman Sachs Funding LLC ("**Funding Intermediate Holding Company**" or "**Funding IHC**") a wholly-owned, direct subsidiary of Group Inc. that facilitates the execution of GS Group's preferred resolution strategy. Although GSBE has taken steps to reduce its reliance on Group Inc. and its affiliates, it remains an operating subsidiary of a larger organisation and therefore its interconnectedness within the organisation will continue. Because GSBE's business relies upon Group Inc. and its affiliates to a significant extent, risks that could affect these entities could also have a significant impact on GSBE.

Furthermore, GSBE relies upon certain Group Inc. affiliates for various support services, including, but not limited to, trade execution, relationship management, settlement and clearing, risk management and other technical, operational and administrative services. Such services are provided to GSBE pursuant to the intercompany services agreement, which is generally terminable upon mutual agreement of Group Inc. and its subsidiaries, subject to certain exceptions, including material breach of the agreement.

As a consequence of the foregoing, in the event GSBE's relationships with other Group Inc. affiliates are not maintained, for any reason, including as a result of possible strategic decisions that Group Inc. may make from time-to-time or as a result of material adverse changes in Group Inc.'s performance, GSBE's interest and non-interest revenues may decline, the cost of operating and funding its business may increase and GSBE's business, financial condition and earnings may be materially and adversely affected.

Furthermore, GSBE receives a portion of its funding in the form of unsecured funding indirectly from Group Inc. and from Funding IHC, and collateralised financings from other Group Inc. affiliates. To the extent such funding is not available to GSBE, its growth could be constrained and/or its cost of funding could increase.



## V. LEGAL AND REGULATORY RISKS

In the category "Legal and Regulatory Risks", the risks are classified according to their materiality. The most material risks are mentioned first.

### **1. GSBE's businesses and those of its clients, are subject to extensive and pervasive regulation in various jurisdictions in which GSBE or its branches operate.**

As a participant in the financial services industry and a subsidiary of a systemically important financial institution, GSBE is subject to extensive regulation, principally in Germany and the EU more generally, but also in the U.S. as a direct subsidiary of GS Bank USA, a New York chartered bank and a member of the Federal Reserve System, and as an indirect subsidiary of Group Inc., a financial holding company subject to regulation and supervision by the Board of Governors of the Federal Reserve System ("**FRB**"), and in certain other jurisdictions. In particular, as an investment firm GSBE is subject to organisational requirements and conduct of business obligations under the German Securities Trading Act which transposes Directive 2014/65/EU (MiFID II) into German law. In connection with this, GSBE is subject to supervision by the German Federal Financial Supervisory Authority ("**BaFin**"). Further, BaFin also supervises money laundering under the German Money Laundering Act and has instructed GSBE to comply with its due diligence obligations regarding clients and the risk analysis requirements.

As a consequence of this extensive regulation and supervision, GSBE faces the risk of significant intervention by law enforcement, regulatory and tax authorities, as well as private litigation, in all jurisdictions in which it conducts its businesses. This may include the audit of specific functions or the remediation of any reporting issues which may be time consuming and requires the dedication of resources. In many cases, GSBE's activities have been and may continue to be subject to overlapping and divergent regulation in different jurisdictions. Among other things, as a result of regulators, taxing authorities, law enforcement authorities or private parties challenging GS Group's and GSBE's compliance with existing laws and regulations, GS Group and GSBE or their employees have been and could be, fined, criminally charged or sanctioned; prohibited from engaging in some of GSBE's business activities; prevented from engaging in new activities, subjected to limitations or conditions on activities, including higher capital requirements; or subjected to new or substantially higher taxes or other governmental charges in connection with the conduct of its business or with respect to its and GS Group's employees. These limitations or conditions may limit business activities and negatively impact GSBE's profitability and may expose GSBE to reputational risks.

In addition to the impact on the scope and profitability of GSBE's business activities, day-to-day compliance with existing laws and regulations has involved and will continue to involve significant amounts of time, including that of GSBE's senior leaders and that of a large number of

dedicated compliance and other reporting and operational personnel, all of which may negatively impact GSBE's profitability.

GSBE's revenues and profitability and those of its competitors have been and will continue to be impacted by requirements relating to capital, additional loss-absorbing capacity, leverage, minimum liquidity and long-term funding levels, requirements related to resolution and recovery planning, derivatives clearing and margin rules and levels of regulatory oversight, as well as limitations on which and, if permitted, how certain business activities may be carried out by financial institutions. The laws and regulations that apply to GSBE's businesses are often complex and, in many cases, GSBE must make interpretive decisions regarding the application of those laws and regulations to its business activities. Changes in interpretations, whether in response to regulatory guidance, industry conventions, GSBE's own reassessments or otherwise, could adversely affect its businesses, results of operations or ability to satisfy applicable regulatory requirements, such as capital or liquidity requirements. In addition, as a subsidiary of GS Bank USA, GSBE is subject to limits on the nature and scope of its activities under the FRB's Regulation K. In particular, GSBE's activities are limited to those that are permissible under Regulation K, and its underwriting and market making in equity securities are each subject to limits based on GSBE's and/or GS Bank USA's capital.

If there are new laws or regulations or changes in the interpretation or enforcement of existing laws or regulations applicable to GSBE or GS Bank USA specifically, GS Group generally or the business activities of either GSBE's or GS Group's clients, including capital, liquidity, leverage, long-term debt, TLAC and margin requirements, restrictions on leveraged lending or other business practices, reporting requirements, requirements relating to the implementation of the EU Bank Recovery and Resolution Directive, tax burdens and compensation restrictions, that are imposed on a limited subset of financial institutions (whether based on size, method of funding, activities, geography or other criteria), compliance with these new laws and regulations, or changes in the enforcement of existing laws or regulations, could adversely affect GSBE's or GS Group's ability to compete effectively with other institutions that are not affected in the same way. In addition, regulation imposed on financial institutions or market participants generally, such as taxes on stock transfers, share repurchases and other financial transactions, could adversely impact levels of market activity more broadly, and thus impact GSBE's business. Changes to laws and regulations, such as tax laws, could also have a disproportionate impact on GSBE, based on the way those laws or regulations are applied to financial services and financial firms or due to its corporate structure or where these services are provided.

These developments could impact GSBE's profitability in the affected jurisdictions, or even make it uneconomic to continue to conduct all or certain businesses in those jurisdictions, or could result in GSBE incurring significant costs associated with changing business practices, restructuring businesses, moving all or certain businesses and employees to other locations or complying with applicable capital requirements, including liquidating assets or raising capital in a manner that

adversely increases GSBE's funding costs or otherwise adversely affects its shareholder and creditors.

The implementation of higher capital requirements, more stringent requirements relating to liquidity and requirements relating to the prohibition on proprietary trading and lending to covered funds by e.g. the provisions under the German Banking Act as regards the separation of certain banking activities which will become applicable to GSBE on 31 December 2023 may adversely affect GSBE's profitability and competitive position, particularly if these requirements do not apply equally to GSBE's competitors or are not implemented uniformly across jurisdictions. GSBE may also become subject to higher and more stringent capital and other regulatory requirements as a result of the implementation of Basel Committee on Banking Supervision's standards, including the credit and operational risk capital standards published in December 2017 and the market risk capital standard published in January 2019.

GSBE is also subject to laws and regulations, such as the EU's General Data Protection Regulation ("**GDPR**"), relating to the privacy of the information of clients, employees or others, and any failure to comply with these laws and regulations could expose GSBE to liability and/or reputational damage. As new privacy-related laws and regulations are implemented, the time and resources needed for GSBE to comply with such laws and regulations, as well as GSBE's potential liability for non-compliance and reporting obligations in the case of data breaches, may significantly increase.

In addition, GSBE's businesses are increasingly subject to laws and regulations relating to surveillance, encryption and data on-shoring in the jurisdictions in which GSBE operates. Compliance with these and other laws and regulations may require GSBE to change its policies, procedures and technology for information security, which could, among other things, make GSBE more vulnerable to cyber-attacks and misappropriation, corruption or loss of information or technology.

Increasingly, regulators and courts have sought to hold financial institutions liable for the misconduct of their clients where they have determined that the financial institution should have detected that the client was engaged in wrongdoing, even though the financial institution had no direct knowledge of the activities engaged in by its client. In addition, regulators and courts continue to seek to establish "fiduciary" obligations to counterparties to which no such duty had been assumed to exist. To the extent that such efforts are successful, the cost of, and liabilities associated with, engaging in market-making and other similar activities could increase significantly. To the extent that GSBE has fiduciary obligations in connection with acting as a financial adviser, any breach, or even an alleged breach, of such obligations could have materially negative legal, regulatory and reputational consequences.

Further, GSBE is subject to regulatory settlements, orders and feedback that require significant remediation activities, which require GSBE to commit significant resources, including hiring, as well as testing the operation and effectiveness of new controls, policies and procedures.

## **2. As a significant credit institution within the Eurozone, GSBE operates under an extensive regulatory regime, including direct supervision by the ECB.**

GSBE is subject to laws and regulations, administrative actions and policies as well as related oversight from the local regulators in each of the jurisdictions in which it has operations (in particular, but not limited to, Germany). GSBE is under the direct supervision, and subject to the regulations, of the European Central Bank (the "**ECB**") as a result of the size of its assets and considerations by the ECB in the context of the single supervisory mechanism ("**SSM**"), which is based, inter alia, on the Council Regulation (EU) No. 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions ("**SSM Regulation**"). The laws and regulations, administrative actions and policies that apply to or could impact GSBE, are subject to change and may lead to additional regulatory requirements, increased cost of compliance and reporting for GSBE.

Furthermore, they may require re-adjustment of GSBE's business plan or have other material adverse effects on its business, results from normal operations or financial condition. In connection with this, it is to be noted, that due to the expansion of business activities the supervisory requirements for GSBE have further increased. The ECB regularly assesses and measures the risks for each bank under its supervision within the so called Supervisory Review and Evaluation Process (SREP). The purpose of the SREP is to allow banks' risk profiles to be assessed consistently and decisions about necessary supervisory measures to be taken. A non-compliance with such measures or other regulations, if taken, may result in administrative penalties and/or enforcement measures.

There is an extensive and complex program of final and proposed regulatory enhancements which reflects, in part, the EU's commitment to the G20 policy framework. These proposed or adopted numerous market reforms that have impacted and may continue to impact GSBE's businesses. These include stricter capital and liquidity requirements, including legislation (in the form of EU Directive 2013/36/EU, as amended or replaced from time to time, the "**CRD IV**" and a Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 646/2012 (as amended, supplemented or replaced from time to time, the "**CRR**", together with the CRD IV, the "**CRD IV/CRR-package**") to implement the Basel Committee's December 2010 final capital framework for strengthening international capital standards (the "**Basel III**" capital requirements) for GSBE.

On 7 June 2019 the following regulations and directives amending the CRD IV/CRR-package and the EU Bank Recovery and Resolution Directive (the "**BRRD**"), have been published in the Office Journal of the European Union and each of these legal acts came into force on 27 June 2019: (i) Regulation (EU) 2019/876, amending, inter alia, the CRR, (ii) Regulation (EU) 2019/877,

amending the SRM Regulation, (iii) Directive (EU) 2019/878, amending CRD IV and (iv) Directive (EU) 2019/879, amending, inter alia, the BRRD (so-called "**CRD-V/CRR-II/BRRD-II-Package**"). The CRD-V/CRR-II/BRRD-II-Package includes, among others, (i) adjustments to the leverage ratio requirement, (ii) the introduction of a binding detailed net stable funding ratio which will require credit institutions to finance their long-term activities (assets and off-balance sheet items) with stable sources of funding (liabilities), (iii) a requirement to have more risk-sensitive own funds (i.e. capital requirements) for institutions that trade in securities and derivatives, following Basel's work on the 'fundamental review of the trading book', and (iv) the implementation of new standards on the total loss absorbing capacity by which the TLAC Standard of global systemically important institutions is being implemented into binding European law.

On 27 October 2021, the European Commission has adopted a review of the CRR and the CRD ("**Banking Package 2021**") that seeks to enhance financial stability in terms of potential future economic shocks, while contributing to Europe's recovery from the COVID-19 pandemic and the transition to climate neutrality.

These requirements and, in particular, any requests from regulators for higher capitalisation and higher capital ratios could have a material adverse effect on the business, results of operations or financial condition of GSBE even before the proposed application date of the Banking Package 2021 on 1 January 2025.

Additionally, Directive 2014/49/EU on deposit guarantee schemes already requires that the financial means dedicated to the compensation of the depositors in times of stress will have to amount to 0.8 per cent. of the amount of the covered deposits by 3 July 2024. The calculation of the contributions shall be made in due consideration of the individual bank's risk profile. Due to the Deposit Protection Act (*Einlagensicherungsgesetz*), which has implemented the Directive 2014/49/EU into German law, the associated systems of calculation of contributions have been updated, resulting in an additional financial burden because of new annual contributions for GSBE from 2015 until 2024. Further, on 24 November 2015, the European Commission proposed to create a uniform Euro area wide deposit guarantee scheme for bank deposits ("**EDIS**"), which would include the creation of the European Deposit Insurance Fund, to be financed through contributions from the banking industry. Subject to the final agreement and subsequent implementation, the creation of the EDIS may have material adverse effects on GSBE business, results of operations or financial condition which might, in turn, negatively affect its ability to fulfil its obligations under securities issued or guaranteed by it.

### **3. GSBE is subject to resolution and recovery regulation and planning in Europe and Germany.**

At the European level, the BRRD entered into force on 2 July 2014 which defines a framework for the recovery and resolution of credit institutions and investment firms. Its stated aim is to

provide national "resolution authorities" with powers and tools to address banking crises pre-emptively in order to safeguard financial stability and minimise taxpayers' exposure to losses.

Further, the EU institutions have established a single resolution mechanism (the "**SRM**") which has been introduced by Regulation (EU) No. 806/2014 of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010 (the "**SRM Regulation**"). Under the SRM, a single resolution process applies to all banks established in EU member states participating in the SSM (that is, all member states in the Eurozone and other member states participating in the SSM). The SRM Regulation is closely connected with the bank recovery and resolution directive ("**BRRD**") which is implemented into German law by the Restructuring and Resolution Act (*Sanierungs- und Abwicklungsgesetz* – "**SAG**"). The resolution tools available to the SRB and the Commission under the SRM Regulation are intended to correspond to those set out in the BRRD, with the SRB having decision rights with regard to many of the functions assigned to national resolution authorities by the BRRD. As a result of the application of the resolution tools, creditors of GSBE may already prior to the occurrence of insolvency or a liquidation of GSBE be exposed to the risk of losing part or all of their invested capital.

The SAG and the SRM provide for a broad range of resolution measures, related effects and uncertainties. Such resolution tools and powers can be applied if, inter alia, the continued existence of GSBE or Group affiliates is at risk (*Bestandsgefährdung*) and a resolution action is necessary in the public interest (*Öffentliches Interesse*). The resolution tools include the bail-in tool and the write down or conversion of capital instruments tool (collectively referred to as "Resolution Measures").

The bail-in tool and the write down or conversion of capital instruments tool empower the competent resolution authorities – besides other resolution powers and, under certain conditions and subject to certain exceptions – to permanently write down the value (including a write down to zero) of, in the case of the write down or conversion of capital instruments tool, own funds instruments and, in the case of the bail-in tool, unsubordinated liabilities and subordinated liabilities not qualifying as own funds instruments of the relevant financial institution, including bonds, or order their conversion into equity instruments (the "**Bail-in**") in order to recapitalise an institution that meets the requirements for resolution or to capitalise a bridge institution established to carry on parts of the business of the institution for a transitional period; the write down or conversion of capital instruments tool may also be applied if not GSBE itself, but the group of GSBE meets the resolution requirements. The application of the Resolution Measures may release GSBE from its obligations under securities issued or guaranteed by it. Potential investors in securities issued or guaranteed by GSBE should therefore take into consideration that, if GSBE is failing or likely to fail and thus already prior to any liquidation or insolvency or such procedures

being instigated, they will to a particular extent be exposed to a risk of default and that it is likely that they will suffer a partial or full loss of their investment.

Investors should be aware that the exercise of any such resolution power or even the suggestion of any such potential exercise in respect of GSBE (or any member of its group) could have a material adverse effect on the rights of holders of Securities, and could lead to a loss of some or all of the investment. The resolution regime is designed to be triggered prior to insolvency of the relevant institution, and holders of securities issued or guaranteed by such institution may not be able to anticipate the exercise of any resolution power (including exercise of the "bail-in" tool) by the competent authority. Further, holders of securities issued or guaranteed by an institution which has been taken into a resolution regime will have very limited rights to challenge the exercise of powers by the competent authority, even where such powers have resulted in the write down of the securities or conversion of the securities to equity.

The single resolution Fund ("**SRF**") established by the SRM Regulation may in certain circumstances and subject to various conditions provide medium term funding for potential resolution measures in respect of any bank that is subject to the SRM. Credit institutions such as GSBE are required to provide contributions to the SRF, including annual contributions and ex-post contributions. These contributions constitute a substantial financial burden for GSBE. Should another bank be subject to resolution measures under the SRM, GSBE could be obliged to provide further contributions. As a result, financial losses of GSBE could arise and materially negatively affect the financial position of GSBE and its ability to fulfil its obligations it has under securities issued or guaranteed by it.

#### **4. A failure to appropriately identify and address potential conflicts of interest could adversely affect GSBE's businesses.**

Due to the broad scope of GS Group's businesses and client base, GSBE regularly addresses potential conflicts of interest within the organisation, including situations where GSBE's services to a particular client or GS Group's investments or other interests conflict, or are perceived to conflict, with the interests of that client or another client, as well as situations where one or more of GS Group's businesses have access to material non-public information that may not be shared within GS Group and situations where it may be a creditor of an entity with which GSBE or GS Group also has an advisory or other relationship.

In addition, in certain areas GSBE or one or more of its affiliates may act as a fiduciary which could give rise to a conflict if GSBE also act as a principal in the same business.

GSBE has extensive procedures and controls that are designed to identify and address conflicts of interest, including those designed to prevent the improper sharing of information among GSBE and its affiliates. However, appropriately identifying and dealing with conflicts of interest is complex and difficult, particularly as GSBE expands its activities and its reputation, which is one

of its most important assets, could be damaged and the willingness of clients to enter into transactions with GSBE may be adversely affected if GSBE or its affiliates fail, or appear to fail, to identify, disclose and deal appropriately with conflicts of interest. In addition, potential or perceived conflicts could give rise to litigation or regulatory enforcement actions. Additionally, Group, Inc.'s *One Goldman Sachs* initiative aims to increase collaboration among its businesses, which may increase the potential for actual or perceived conflicts of interest and improper information sharing. The realignment of GS Group's businesses, reflected in GS Group's new segments beginning with the fourth quarter of 2022, presents similar risks.

**5. Substantial civil or criminal liability or significant regulatory action against GSBE could have material adverse financial effects, or cause significant reputational harm, which in turn could seriously harm its business prospects.**

GSBE has been involved in a number of judicial, regulatory and other proceedings concerning matters arising in connection with the conduct of GSBE's business, e.g. in connection with GSBE's underwriting activities or activities as a member of various trading venues.

In addition, GS Group is involved in a number of judicial, regulatory and other proceedings, as well as investigations and reviews by various governmental and regulatory bodies and self-regulatory organisations. Proceedings by regulatory or other governmental authorities could result in the imposition of significant fines, penalties and other sanctions against GS Group, including restrictions on GS Group's activities. As an indirect subsidiary of Group Inc. and a direct subsidiary of GS Bank USA, any such fines, penalties or other sanctions, including any that could be imposed on GSBE directly, could adversely affect GSBE, possibly materially.

GSBE faces the risk of investigations and proceedings by governmental and self-regulatory organisations in all jurisdictions in which GSBE conducts its business. This may also include investigations or proceedings by tax authorities or generally investigations or proceedings in relation to tax matters. Interventions by authorities may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. In addition to the monetary consequences, these measures could, for example, impact GSBE's ability to engage in, or impose limitations on, certain aspects of its business.

Litigation or regulatory action at the level of other GS Group entities may also have an impact on GSBE, including limitations on activities and reputational harm. The number of these investigations and proceedings, as well as the amount of penalties and fines sought, has increased substantially in recent years with regard to many firms in the financial services industry, including GS Group.

The trend of large settlements with governmental entities may adversely affect the outcomes for other financial institutions, including, in some cases, GS Group, in similar actions, especially where governmental officials have announced that the large settlements will be used as the basis



or a template for other settlements. The uncertain regulatory enforcement environment makes it difficult to estimate probable liabilities, and settlements of matters therefore frequently exceed the amount of any reserve established.

**6. In conducting its business in various jurisdictions, GSBE is subject to political, legal, regulatory and other risks that are inherent in operating in many countries.**

In conducting its business, GSBE is subject to risks of possible nationalization, expropriation, price controls, capital controls, exchange controls, communications and other content restrictions, and other restrictive governmental actions. In many countries, the laws and regulations applicable to the securities and financial services industries and many of the transactions in which GSBE is involved are uncertain and evolving, and it may be difficult for GSBE to determine the exact requirements of local laws in every market. GSBE has been, in some cases, subject to divergent and conflicting laws and regulations across markets, and GSBE is increasingly subject to the risk that the jurisdictions in which GSBE operates has implemented or may implement laws and regulations that directly conflict with those of another jurisdiction. Any determination by local regulators that GSBE has not acted in compliance with the application of local laws in a particular market or GSBE's failure to develop effective working relationships with local regulators could have a significant and negative effect not only on GSBE's businesses in that market, but also on its reputation generally. Further, in some jurisdictions a failure, or alleged failure, to comply with laws and regulations has subjected and may in the future subject GSBE and its personnel not only to civil actions, but also criminal actions and other sanctions. GSBE is also subject to the enhanced risk that transactions GSBE structures might not be legally enforceable in all cases.

**7. The application of regulatory strategies and requirements to facilitate the orderly resolution of large financial institutions could create greater risk of loss for GSBE's security holders.**

The circumstances in which a resolution authority would exercise its "bail-in" powers to recapitalize a failing entity by writing down its unsecured debt or converting it into equity are uncertain. If these powers were to be exercised (or if there was a suggestion that they could be exercised) in respect of GSBE, such exercise would likely have a material adverse effect on the value of debt investments in GSBE, including a potential loss of some or all of such investments.

## VI. COMPETITION RISKS

In the category "Competition Risks", the risks are classified according to their materiality. The most material risks are mentioned first.

### **1. GSBE's results have been and may in the future be adversely affected by the composition of its client base.**

GSBE's client base is not the same as that of its major competitors. GSBE's businesses may have a higher or lower percentage of clients in certain industries or markets than some or all of its competitors. Therefore, unfavourable industry developments or market conditions affecting certain industries or markets have resulted in the past and may result in the future in GSBE's businesses underperforming relative to similar businesses of a competitor if its businesses have a higher concentration of clients in such industries or markets.

Correspondingly, favourable or simply less adverse developments or market conditions involving industries or markets in a business where GSBE has a lower concentration of clients in such industry or market have also resulted in the past and may result in the future in GSBE underperforming relative to a similar business of a competitor that has a higher concentration of clients in such industry or market. For example, GSBE has a smaller corporate client base in its market-making businesses than some of its peers and therefore GSBE's competitors may benefit more from increased activity by corporate clients. Similarly, GSBE has not historically engaged in retail equities intermediation to the same extent as other financial institutions, which has in the past affected and could in the future adversely affect its market share in equities execution.

### **2. The financial services industry is highly competitive.**

The financial services industry and GSBE's activities are intensely competitive, and GSBE expects them to remain so. GSBE competes on the basis of a number of factors, including its products and services, innovation, reputation, creditworthiness and price. As GSBE has expanded into new business areas and new geographic regions, it has faced competitors with more experience and more established relationships with clients, regulators and industry participants in the relevant market, which could adversely affect its ability to expand its businesses.

Governments and regulators have adopted regulations, imposed taxes, adopted compensation restrictions or otherwise put forward various proposals that have impacted or may impact GSBE's ability to conduct certain of its businesses in a cost-effective manner or at all in certain or all jurisdictions, including proposals relating to restrictions on the type of activities in which financial institutions are permitted to engage. These or other similar rules, many of which do not apply to all GSBE's competitors, could impact its ability to compete effectively.

Pricing and other competitive pressures in GSBE's businesses have continued to increase, particularly in situations where some of GSBE's competitors may seek to increase market share by reducing prices.

The financial services industry is highly interrelated in that a significant volume of transactions occur among a limited number of members of that industry. Many of GSBE's and GS Group's transactions are syndicated to other financial institutions and financial institutions are often counterparties in transactions. This has led to claims by other market participants and regulators that such institutions have colluded in order to manipulate markets or market prices, including allegations that antitrust laws have been violated. While GS Group has extensive procedures and controls that are designed to identify and prevent such activities, they may not be effective. Allegations of such activities, particularly by regulators, can have a negative reputational impact and can subject GSBE to large fines and settlements, and potentially significant penalties, including treble damages.

### **3. GSBE's businesses would be adversely affected if it was unable to hire and retain qualified employees.**

GSBE's performance is largely dependent on the talents and efforts of highly skilled people; therefore, GSBE's continued ability to compete effectively in its businesses, to manage its businesses effectively and to expand into new lines of business depends on its ability and GS Group's ability to attract new talented and diverse employees and to retain and motivate existing employees. Factors that affect GSBE's and GS Group's ability to attract and retain such employees include the level and composition of GS Group's compensation and benefits, and GS Group's reputation as a successful business with a culture of fairly hiring, training and promoting qualified employees. As a significant portion of the compensation that GS Group pays to its employees is in the form of year-end discretionary compensation, a significant portion of which is in the form of deferred equity-related awards, declines in GS Group's profitability, or in the outlook for its future profitability, as well as regulatory limitations on compensation levels and terms, can negatively impact GSBE's and GS Group's ability to hire and retain highly qualified employees.

Competition from within the financial services industry and from businesses outside the financial services industry, including the technology industry, for qualified employees has often been intense. GS Group (including GSBE) has experienced increased competition in hiring and retaining employees to address the demands of expending consumer-oriented businesses and technology initiatives. This is also the case in emerging and growth markets, where GSBE may often compete for qualified employees with entities that have a significantly greater presence or more extensive experience in the region.

Laws or regulations in jurisdictions in which GSBE's operations are located that affect taxes on GSBE's employees' income, or the amount or composition of compensation, or that require the

company to disclose its competitors' compensation practices may also adversely affect GSBE's ability to hire and retain qualified employees in those jurisdictions.

GSBE's compensation practices are subject to review by the ECB within the context of the European Single Supervisory Mechanism, BaFin and the Deutsche Bundesbank. As a large financial institution, GSBE is subject to limitations on compensation practices. These limitations, including any imposed by or as a result of future legislation or regulation, may require GSBE to alter compensation practices in ways that could adversely affect its ability to attract and retain talented employees.

## **VII. MARKET DEVELOPMENTS AND GENERAL BUSINESS ENVIRONMENT RISKS**

In the category "Market Developments and General Business Environment Risks", the risks are classified according to their materiality. The most material risks are mentioned first.

### **1. GSBE's businesses, financial condition, liquidity and results of operations have been and may in the future be adversely affected by unforeseen or catastrophic events, including pandemics, terrorist attacks, extreme weather events or other natural disasters.**

The occurrence of unforeseen or catastrophic events, including pandemics, such as COVID-19, or other widespread health emergencies (or concerns over the possibility of such an emergency), terrorist attacks, extreme weather events, solar events or other natural disasters, could adversely affect GSBE's business, financial condition, liquidity and results of operations. These events could have such effects through economic or financial market disruptions or challenging economic or market conditions more generally, the deterioration of GSBE's creditworthiness or that of its counterparties, changes in consumer sentiment and consumer borrowing, spending and savings patterns, liquidity stress, or operational difficulties (such as travel limitations and limitations on occupancy in GS Group's offices) that could impair GSBE's ability to manage its businesses.

The COVID-19 pandemic created economic and financial disruptions that have in the past adversely affected, and may in the future adversely affect GSBE's business, financial condition, liquidity and results of operations. The extent to which the COVID-19 pandemic will negatively affect GSBE's businesses, financial condition, liquidity and results of operations will depend on, among other things, future developments, including, any resurgence of COVID-19 cases, the emergence of new variants of COVID-19 and the effectiveness of vaccines and treatments over the long term and against new variants, which are highly uncertain and cannot be predicted.

### **2. GSBE may be adversely affected by negative publicity.**

Governmental scrutiny from regulators, legislative bodies and law enforcement agencies with respect to matters relating to GSBE's or GS Group's business practices, past actions, compensation and other matters remains at high level. Political and public sentiment regarding financial institutions has in the past resulted and may in the future result in a significant amount of adverse press coverage, as well as adverse statements or charges by regulators or other government officials. Press coverage and other public statements that assert some form of wrongdoing (including, in some cases, press coverage and public statements that do not directly involve GSBE, Group Inc. or GS Group's other subsidiaries) often result in some type of investigation by regulators, legislators and law enforcement officials or in lawsuits.

Responding to these investigations and lawsuits, regardless of the ultimate outcome of the proceeding, is time-consuming and expensive and can divert the time and effort of GSBE's management. Penalties and fines sought by regulatory authorities have increased substantially and certain regulators have been more likely in recent years to commence enforcement actions or to advance or support legislation targeted at the financial services industry. Governmental authorities may also be more likely to pursue criminal or other actions, including seeking admissions of wrongdoing or guilty pleas, in connection with the resolution of an inquiry or investigation to the extent a company is viewed as having previously engaged in criminal, regulatory or other misconduct. Adverse publicity, governmental scrutiny and legal and enforcement proceedings can also have a negative impact on GSBE's reputation and on the morale and performance of GSBE's employees, which could adversely affect GSBE's businesses and results of operations.

Further, GS Group is subject to regulatory settlements, orders and feedback that require significant remediation activities, which require the commitment of significant resources, including hiring, as well as testing the operation and effectiveness of new controls, policies and procedures.

The financial services industry generally and GSBE's businesses in particular have been subject to negative publicity. GSBE's reputation and businesses may be adversely affected by negative publicity or information regarding its business and personnel, whether or not accurate or true, that may be posted on social media or other internet forums or published by news organisations. Postings on these types of forums may also adversely impact risk positions of GSBE's clients and other parties that owe it money, securities or other assets and increase the chance that they will not perform their obligation to GSBE or reduce the revenues received from their use of GSBE's services. The speed and pervasiveness with which information can be disseminated through these channels, in particular social media, may magnify risks relating to negative publicity.

**3. Climate change could disrupt GSBE's businesses, adversely affect client activity levels, and the creditworthiness of its clients, counterparties and GSBE's efforts to address concerns relating to climate change could result in damage to its reputation.**

Climate change may cause extreme weather events that disrupt operations at one or more of GSBE's or GS Group's primary locations, which may negatively affect GSBE's ability to service and interact with its clients, adversely affect the value of its investments, including its real estate investments, and reduce the availability or increase the cost of insurance. Climate change and the transition to a less carbon-dependent economy may also have a negative impact on the operations or financial condition of GSBE's clients and counterparties, which may decrease revenues from those clients and counterparties and increase the credit risk associated with loans and other credit exposures to those clients and counterparties. In addition, climate change may impact the broader economy.

GSBE is also exposed to risks resulting from changes in public policy, laws and regulations, or market and public perceptions and preferences in connection with the transition to a less carbon-dependent economy. These changes could adversely affect GSBE's businesses, results of operations and reputation. For example, GSBE's reputation and client relationships may be damaged as a result of its involvement, or its clients' involvement in, or decision not to participate in, in certain industries or projects associated with causing or exacerbating climate change, as well as any decisions GSBE makes to continue to conduct or change its activities in response to considerations relating to climate change. If GSBE is unable to achieve its objectives relating to climate change or its response to climate change is perceived to be ineffective or insufficient, or otherwise inappropriate, its businesses, reputation and efforts to recruit and retain employees may suffer.

New regulations or guidance relating to climate change, as well as the perspectives of government officials, regulators, Group Inc. shareholders, employees and other stakeholders regarding climate change, may affect whether and on what terms and conditions GSBE engages in certain activities or offer certain products. Banking regulators and supervisory authorities, shareholders and other stakeholders have increasingly viewed financial institutions as playing an important role in helping to address risks related to climate change, both directly and with respect to their clients, which may result in financial institutions coming under increased requirements and expectations regarding the disclosure and management of their climate risks and related lending, investment and advisory activities. The FRB has announced that GS Group is among the six U.S. financial institutions participating in a pilot climate scenario analysis exercise in 2023, and is subject to new or heightened regulatory requirements relating to climate change, such as requirements relating to operational resiliency or stress testing for various climate stress scenarios. Any such new or heightened requirements could result in increased regulatory, compliance or other costs or higher capital requirements. The risks associated with, and the perspective of regulators, Group Inc. shareholders, employees and other stakeholders regarding, climate change are continuing to evolve rapidly, which can make it difficult to assess the ultimate impact on GSBE of climate change-related risks and uncertainties, and GSBE expects that climate change-related risks will increase over time.

Climate change concerns could disrupt GSBE's business, adversely affect client activity levels, adversely affect the creditworthiness of its counterparties and damage GSBE's reputation.

#### **4. GSBE's business, financial condition, liquidity and results of operations may be adversely affected by disruptions in the global economy caused by Russia's invasion of Ukraine and related sanctions and other developments.**

The war between Russia and Ukraine has negatively affected the global economy. Governments around the world have responded to Russia's invasion by imposing economic sanctions and export controls on certain industry sectors, including price caps on Russian oil, and parties in Russia. Compliance with economic sanctions and restrictions imposed by governments has increased GS

Group's costs and otherwise adversely affected GS Group's business and may continue to do so. Russia has responded with its own restrictions against investors and countries outside Russia and has proposed additional measures aimed at non-Russia owned businesses. Businesses in the U.S. and globally have experienced shortages in materials and increased costs for transportation, energy, and raw materials due in part to the negative effects of the war on the global economy. The escalation or continuation of the war between Russia and Ukraine or other hostilities could result in, among other things, further increased risk of cyber attacks, an increased frequency and volume of failures to settle securities transactions, supply chain disruptions, higher inflation, lower consumer demand and increased volatility in commodity, currency and other financial markets.

As of December 2022, GSBE's total credit exposure to Russian or Ukrainian counterparties or borrowers and GSBE's total market exposure to Russian or Ukrainian issuers was not material. GS Group has curtailed its operations in Russia to those necessary to meet its legal and regulatory obligations. The extent and duration of the war, sanctions and resulting market disruptions are impossible to predict, and the consequences for GS Group's business could be significant.

**5. Certain of GSBE's businesses, its funding instruments and financial products may be adversely affected by changes in other reference rates, currencies, indices, baskets or exchange-traded funds to which products it offers or funding it raises are linked.**

Certain of GSBE's funding, including funding raised from affiliates and third parties, may be floating rate and pay interest by reference to a rate.

In addition, certain of the products that GSBE owns or that it offers, such as structured notes, warrants, swaps or security-based swaps, pay interest or determine the principal amount to be paid at maturity or in the event of default by reference to rates or by reference to an index, currency, basket, exchange-traded funds ("ETF") or other financial metric (the underlier). In the event that the composition of the underlier is significantly changed, by reference to rules governing such underlier or otherwise, the underlier ceases to exist (for example, in the event that a country withdraws from the Euro or links its currency to or delinks its currency from another currency or benchmark, an index or ETF sponsor materially alters the composition of an index or ETF, or stocks in a basket are delisted or become impermissible to be included in the index or ETF), the underlier ceases to be recognised as an acceptable market benchmark, or there are legal or regulatory constraints on linking a financial instrument to the underlier, GSBE may experience adverse effects consistent with those described for IBORs.

Changes in a rate or an underlier or underliers could result in GSBE's hedges being ineffective or otherwise result in losses on a product or having to pay more or receive less on securities that GSBE owns or has issued. In addition, such uncertainty could result in lengthy and costly litigation.



**6. GSBE's business, financial condition, liquidity and results of operations may be adversely affected by disruptions in the global economy caused by escalating tensions between the U.S. and China.**

Continued or escalating tensions between the U.S. and China have resulted in and may result in additional changes to U.S. international trade and investment policies, which could disrupt international trade and investment, adversely affect financial markets, including market activity levels, and adversely impact GSBE's revenues. Continued or escalating tensions may also lead to the U.S., China or other countries taking other actions, which could include the implementation of sanctions, tariffs or foreign exchange measures, the large-scale sale of U.S. Treasury securities or restrictions on cross-border trade, investment or transfer of information or technology. Any such developments could adversely affect GSBE's or its clients' businesses, as well as GSBE's financial condition, liquidity and results of operations, possibly materially.

A conflict, or concerns about a potential conflict, involving China and Taiwan, the U.S. or other countries could negatively impact financial markets and GSBE's or its clients' businesses. Trade restrictions by the U.S. or other countries in response to a conflict or potential conflict involving China, including financial and economic sanctions and export controls against certain organizations or individuals, or actions taken by China in response to trade restrictions, could negatively impact GSBE's or its clients' ability to conduct business in certain countries or with certain counterparties and could negatively impact regional and global financial markets and economic conditions. Any of the foregoing could adversely affect GSBE's business, financial condition, liquidity and results of operations, possibly materially.

**7. GSBE faces enhanced risks as new business initiatives and acquisitions lead it to engage in new activities, operate in new locations, transact with a broader array of clients and counterparties and expose it to new asset classes markets including the risk of retaining qualified employees.**

A number of GSBE's recent and planned business initiatives (e.g. the issuance of securities, predominantly warrants, but also certificates and notes) and expansions of existing businesses may bring it into contact, directly or indirectly, with individuals and entities that are not within GSBE's traditional client and counterparty base and expose it to new asset classes and markets. In particular, following the exit of the U.K. from the E.U., GSBE is GS Group's main operating subsidiary in the E.U. and has assumed certain functions that can no longer be efficiently and effectively performed by GS Group's U.K. operating subsidiaries. The functions include assuming a number of relationships with GS Group clients; establishing access for GSBE to exchanges, clearinghouses and depositories and other market infrastructure in the E.U.; establishing branches of GSBE in a number of E.U. member states and in the U.K.; and strengthening the capital, personnel and other resources at GSBE. More generally, GSBE continues to transact business and invest in new regions, including a wide range of emerging and growth markets. In addition, as a result of the long-term strategy of GS Group to increase the proportion of its businesses and

activities conducted in Group Inc.'s bank subsidiaries, including GSBE, certain of these new and expanded businesses and activities may have been previously conducted in one or more of GSBE's affiliates, and the transition of such businesses and activities to GSBE could expose GSBE additional risks.

New business initiatives expose GSBE to new and enhanced risks, including risks associated with dealing with governmental entities, reputational concerns arising from dealing with different types of counterparties, clients, business partners and consumers, greater regulatory scrutiny of these activities, increased credit-related, market, sovereign and operational risks, risks arising from accidents or acts of terrorism, and reputational concerns with the manner in which GSBE engages in these activities, interact with these counterparties, clients, business partners and consumers or address the product or service requirements of these new types of clients.

Legal, regulatory and reputational risks may also exist in connection with activities and transactions involving new products or markets where there is regulatory uncertainty or where there are different or conflicting regulations depending on the regulator or the jurisdiction involved, particularly where transactions in such products may involve multiple jurisdictions.

## **B. GENERAL INFORMATION ON THE REGISTRATION DOCUMENT**

### **I. THE REGISTRATION DOCUMENT AS A PART OF A BASE PROSPECTUS**

Within the meaning of Article 8 paragraph 6 sentence 1 of the Prospectus Regulation the Registration Document will either form a constituent part of a base prospectus consisting of separate documents or the Registration Document will be incorporated by reference into a base prospectus drawn up as a single document.

The Registration Document and/or the other separate documents of the base prospectus are available on the website [www.gs.de](http://www.gs.de) under the sections "About us", "GS Products" and/or "Registration Documents".

### **II. SUPPLEMENTS**

The information in the Registration Document is supplemented, corrected or clarified ("**updated**") by way of future supplements under the conditions as laid out in Article 23 of the Prospectus Regulation.

All supplements will be published on the website [www.gs.de](http://www.gs.de) under the sections "About us", "GS Products" and/or "Registration Documents".

A supplement to the Registration Document will be published if there is a significant new factor or a material mistake or a material inaccuracy relating to the information included in the Registration Document which may affect the assessment of the securities.

### **III. PERSONS RESPONSIBLE**

Goldman Sachs Bank Europe SE, Frankfurt am Main, Germany accepts responsibility for the information provided in the Registration Document. GSBE furthermore declares that the information contained in the Registration Document is, to the best of its knowledge, in accordance with the facts and that the Registration Document makes no omission likely to affect its import.

### **IV. THIRD PARTY INFORMATION**

In the Registration Document information from third parties is incorporated. GSBE confirms that this information has been accurately reproduced and that, as far as GSBE is aware and is able to ascertain from information published by that third party, no facts have been omitted which would render the reproduced information incorrect or misleading.

## V. COMPETENT AUTHORITY APPROVAL

In connection with the approval of the Registration Document the following should be noted:

- a) the Registration Document has been approved by the German Federal Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht* – "**BaFin**"), as competent authority (the "**Competent Authority**") under Regulation (EU) 2017/1129;
- b) BaFin only approves the Registration Document as meeting the standards of completeness, comprehensibility and consistency imposed by Regulation (EU) 2017/1129 and
- c) the approval should not be considered as an endorsement of Goldman Sachs Bank Europe SE, Frankfurt am Main, Germany that is the subject of the Registration Document.

## C. INFORMATION ABOUT GOLDMAN SACHS BANK EUROPE SE

### I. STATUTORY AUDITORS

The statutory auditor for the financial statements of GSBE as of and for the financial years ended 31 December 2022 and 31 December 2021 was Mazars GmbH & Co. KG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft ("**Mazars GmbH & Co. KG**"), Theodor-Stern-Kai 1, 60596 Frankfurt am Main, Deutschland. Mazars GmbH & Co. KG is a member of the German Chamber of Public Accountants (*Wirtschaftsprüferkammer*), a public body (*Körperschaft des öffentlichen Rechts*), Rauchstraße 26, 10787 Berlin.

### II. GENERAL INFORMATION

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

GSBE is registered under the number HRB 114190 in the commercial register of the local court in Frankfurt am Main and incorporated under the laws of Germany.

It has the following legal entity identifier (LEI): 8IBZUGJ7JPLH368JE346.

GSBE has its registered office at:

Goldman Sachs Bank Europe SE  
Marienturm  
Taunusanlage 9-10  
60329 Frankfurt am Main  
Germany.

GSBE can be reached via telephone under +49 69 75 321 000 or via [www.gs.de](http://www.gs.de) (whereby the information contained on such website shall not form part of the Registration Document).

GSBE is directly supervised by the European Central Bank (*ECB*) and additionally the Federal Financial Supervisory Authority (*BaFin*) and the Deutsche Bundesbank in the context of the European Single Supervisory Mechanism.

There have been no recent events particular to GSBE which are to a material extent relevant to the evaluation of GSBE's solvency.

### **III. BUSINESS OVERVIEW**

Goldman Sachs Bank Europe SE provides a wide range of financial services to a diversified client base that includes corporations, financial institutions, and ultrahigh- net-worth individuals, from its registered office in Frankfurt am Main and branches in Amsterdam, Athens, Copenhagen, Dublin, London, Luxembourg, Madrid, Milan, Paris, Stockholm and Warsaw. The major markets in which GSBE operates are Germany and Europe.

The object of GSBE is the transaction of banking business and the provision of financial services. The objects and purposes of GSBE are provided for in Article 2 (*Object of the company*) of the Articles of Association of GSBE and include, for the avoidance of doubt, the right to establish branches in Germany and abroad, to acquire or invest in other companies, to acquire or establish such companies and to conduct any other business which is suitable to promote the object of the company.

GSBE seeks to be the advisor of choice for its clients and a leading participant in financial markets. As part of GS Group, GSBE also enters into transactions with affiliates in the normal course of business as part of its market-making activities and general operations.

GSBE generates revenues from the following business activities: Investment Banking, Fixed Income, Currency and Commodities (*FICC*), Equities (including the issuance of equity derivative securities), and Investment Management, which includes Asset Management and Wealth Management.

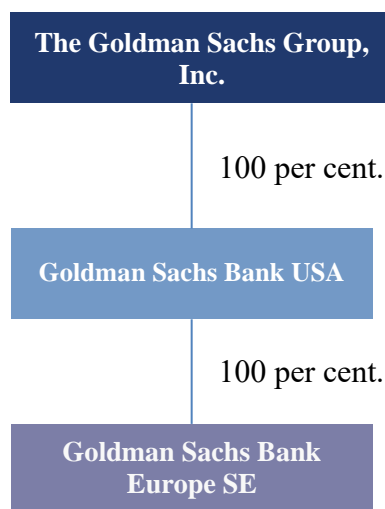
There has been no material change in the borrowing and funding structure of GSBE since the last financial year (31 December 2022).

### **IV. ORGANIZATIONAL STRUCTURE**

The sole shareholder of GSBE is Goldman Sachs Bank USA with its registered office in New York, New York which in turn is a wholly-owned subsidiary of The Goldman Sachs Group Inc. GSBE has its registered office in Frankfurt am Main and branches in Amsterdam, Athens, Copenhagen, Dublin, London, Luxembourg, Madrid, Milan, Paris, Stockholm and Warsaw. A description of the branches' activities may be found in the section "Branches of the bank" on PDF-page 42 of the GSBE Annual Report 2022 (as defined in Section VII.1. below).

The Goldman Sachs Group, Inc. together with its affiliated companies is a globally active financial institution. Through its offices in the USA and the leading financial centres of the world Group Inc. is active in the financial services industry and, after a reorganisation in December 2022, reports its activities in three segments: (1) Global Banking & Markets; (2) Asset & Wealth

Management, and (3) Platform Solutions, into which two lines of businesses have been integrated: transaction banking and consumer platforms.



## V. TREND INFORMATION

There has been no material adverse change in the prospects of GSBE since 31 December 2022 (date of its last published audited financial statement).

Since the end of the last financial period for which financial information has been published (31 December 2022), there has been no significant change in the financial performance of GSBE.

The Russian invasion of Ukraine continues to negatively affect the global economy and has resulted in significant disruptions in financial markets and increased macroeconomic uncertainty. Governments around the world have responded to Russia's invasion by imposing economic sanctions and export controls on specific industry sectors, companies and individuals in Russia.

Retaliatory restrictions against investors, non-Russian owned businesses and other sovereign states have been implemented by Russia. Businesses globally continue to experience shortages in materials and increased costs for transportation, energy and raw materials due, in part, to the negative effects of the war on the global economy. The escalation or continuation of the war between Russia and Ukraine presents heightened risks relating to cyber attacks, third party and agent bank dependencies, supply chain disruptions, and inflation, as well as the potential for increased volatility in commodity, currency and other financial markets. Complying with economic sanctions and restrictions imposed by governments has resulted in increased operational risk. The extent and duration of the war, sanctions and resulting market disruptions, as well as the potential adverse consequences for GSBE's business, liquidity and results of operations, are difficult to predict.

As of December 2022, GSBE had no credit exposure to Russian or Ukrainian counterparties or borrowers or market exposure to Russian or Ukrainian issuers.

During the first quarter of 2023, Silicon Valley Bank and Signature Bank, two regional banks in the U.S., experienced large deposit outflows that ultimately resulted in the failure of these banks in March 2023 and the appointment of the Federal Deposit Insurance Corporation ("FDIC") as receiver for them.

First Republic Bank (First Republic), another U.S. regional bank, also experienced large withdrawals of deposits, raising concerns about its financial stability. On May 1, 2023, First Republic was placed under FDIC receivership, and the FDIC entered into a purchase and assumption agreement with JPMorgan Chase Bank, N.A. under which JPMorgan Chase Bank, N.A. will assume all of the deposits, including uninsured deposits, and substantially all of the assets of First Republic.

In addition, concerns about the solvency of Credit Suisse Group AG, a G-SIB (*Global Systemically Important Banks*) based in Switzerland, escalated rapidly and, as a result, UBS Group AG and Credit Suisse Group AG, working in conjunction with Swiss regulators, entered into an agreement under which UBS Group AG will acquire Credit Suisse Group AG.

These events have placed heightened focus on the impact that rising interest rates have had on the market values of securities portfolios of banks measured at amortised cost. As of December 2022, all of GSBE's bonds and other fixed-income securities were measured at fair value.

GSBE's liquidity position during the first quarter of 2023 remained strong, and GSBE's GCLA (*Global Core Liquid Assets*) averaged €20.35 billion.

A more systemic spread of concerns regarding the financial stability or solvency of banks could negatively impact GSBE's results of operations and financial condition.

## **VI. MANAGEMENT AND LEGAL REPRESENTATION**

The administrative, management and supervisory bodies of GSBE comprise its Executive Board and its Supervisory Board. Set forth below are the names and occupations as well as the business addresses of the members of the Executive Board and the Supervisory Board at the date of this Registration Document.



## Executive Board

<b>Name</b>	<b>Occupation</b>	<b>Business Address</b>	<b>Principal Outside Activities</b>
Dr. Wolfgang Fink (Chairman)	Managing Director	Taunusanlage 9-10, 60329 Frankfurt am Main	<ul style="list-style-type: none"> <li>- Member of the Board of the Association of German Banks</li> <li>- Member of the Board of Deutsches Aktieninstitut</li> <li>- Member of the Board of the American institute for contemporary German studies</li> <li>- Member of the Board of the African Parks Deutschland Stiftung</li> <li>- Advisory Board member of the Foerderverein fuer das Festival Theater der Welt</li> </ul>
Peter Hermann	Managing Director	Taunusanlage 9-10, 60329 Frankfurt am Main	<ul style="list-style-type: none"> <li>- No other outside activities</li> </ul>
Robert Charnley	Managing Director	Taunusanlage 9-10, 60329 Frankfurt am Main	<ul style="list-style-type: none"> <li>- Board Director of OOO Goldman Sachs Bank</li> </ul>
Thomas Degn-Petersen	Managing Director	Taunusanlage 9-10, 60329 Frankfurt am Main	<ul style="list-style-type: none"> <li>- Member of the Board of Goldman Sachs Poland Services Sp. z.o.o</li> <li>- Non-executive director of Goldman Sachs Saudi Arabia</li> <li>- Member of the International Banking Committee of the German Banking Association</li> <li>- Accountant and member of the Chartered Institute of Management Accountants</li> </ul>
Michael Holmes	Managing Director	Taunusanlage 9-10, 60329 Frankfurt am Main	<ul style="list-style-type: none"> <li>- Chair of the Board of Directors of OOO Goldman Sachs Bank</li> <li>- Non-executive Director Goldman Sachs International Service Entities Holdings Limited</li> <li>- Non-executive Director Goldman Sachs Realty Management Europe GmbH</li> </ul>
Dr. Matthias Bock	Managing Director	Taunusanlage 9-10, 60329 Frankfurt am Main	<ul style="list-style-type: none"> <li>- Deputy chairman of the Bankenverband Mitte e.V</li> <li>- Chairman of the Committee for Foreign Banks of the German Banking Association and member of the Legal Committee of the German Banking Association</li> <li>- Serves on the board of the Civitas-Bernhard-Vogel foundation (Beirat) and the Bernhard-Vogel-Fundation (Kuratorium)</li> </ul>
Hei Man Lo	Managing Director	Taunusanlage 9-10, 60329 Frankfurt am Main	<ul style="list-style-type: none"> <li>- No other outside activities</li> </ul>

## Supervisory Board

<b>Name</b>	<b>Occupation</b>	<b>Business Address</b>	<b>Principal Outside Activities</b>
Richard J. Gnodde (Chairman)	Managing Director	Plumtree Court 25 Shoe Lane London EC4A 4AU	- CEO & Board Director of Goldman Sachs International and Goldman Sachs International Bank
Lisa Donnelly	Managing Director	Plumtree Court 25 Shoe Lane London EC4A 4AU	- Board Director of Goldman Sachs International - Board Director of Goldman Sachs International Bank
Dr. Wolfgang Feuring	Lawyer	Taunusanlage 9-10, 60329 Frankfurt am Main	- No other outside activities
Ulrich Pukropski	Retired (Partner in Financial Services)	Taunusanlage 9-10, 60329 Frankfurt am Main	- Independent member of the Risk Monitoring Committee for Deposit Insurance Scheme for „Landesbanken“ in Germany
John F. W. Rogers	Managing Director	101 Constitution Avenue NW, Suite 1000 East Washington, DC 20001	- Chairman of the Goldman Sachs Foundation - Member of the Board of Directors of The Goldman Charitable Gift Fund - Chair Emeritus of the Board of Directors of the Securities Industry and Financial Markets Association - Chairman of the Board of Directors of The Atlantic Council - Vice Chair of the Board of Trustees of the American Academy in Rome - Chairman of the Board of Directors of The White House Historical Association
Philip Berlinski	Managing Director	200 West Street New York, NY 10282	- No other outside activities
Efthalia Chryssikou	Managing Director	Plumtree Court 25 Shoe Lane London EC4A 4AU	- Chair of the Board of Directors of the Association for Financial Markets in Europe on behalf of Goldman Sachs
Simon Morris	Managing Director	Plumtree Court 25 Shoe Lane London EC4A 4AU	- Sole Director and Beneficiary of Boltons Place Capital Management Limited and SPM Capital Management Limited

There are no material potential conflicts of interest between any duties owed to GSBE by the members of the Executive Board or the Supervisory Board of GSBE identified above and their private interests and/or other obligations.

## **VII. FINANCIAL INFORMATION CONCERNING GSBE'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFIT AND LOSSES**

### **1. Historical financial information for the financial year 2022 (German Commercial Code (Handelsgesetzbuch - HGB))**

The Annual Financial Statements and the Management Report of GSBE for the financial year ended 31 December 2022 (German Commercial Code (Handelsgesetzbuch – HGB)) ("GSBE Annual Report 2022") are incorporated by reference pursuant to Article 19 of the Prospectus Regulation (detailed information about the pages in the financial statements can be found in section "X. Information incorporated by reference").

### **2. Historical financial information for the financial year 2021 (German Commercial Code (Handelsgesetzbuch - HGB))**

The Annual Financial Statements and the Management Report of GSBE for the financial year ended 31 December 2021 (German Commercial Code (Handelsgesetzbuch – HGB)) ("GSBE Annual Report 2021") are incorporated by reference pursuant to Article 19 of the Prospectus Regulation (detailed information about the pages in the financial statements can be found in section "X. Information incorporated by reference").

### **3. Auditing of historical financial information**

Mazars GmbH & Co. KG audited the financial statements of GSBE as of and for the financial years ended 31 December 2022 and 31 December 2021 and issued in each case an unqualified auditor's report (Bestätigungsvermerk).

### **4. Legal and arbitration proceedings**

During the last 12 months, there were no governmental, legal or arbitration proceedings which may have, or have had in the recent past, significant effects on GSBE's financial position or profitability, and none of them were settled during the last 12 months, respectively. Neither are there any such proceedings pending or threatened of which GSBE is aware.

### **5. Significant change in GSBE's financial position**

Since the end of the last financial period for which audited financial statements have been published (31 December 2022) no significant change in GSBE's financial position has occurred.

### **6. Statements in relation to prospects, financial performance or financial position**

In this Registration Document, where GSBE makes statements that "there has been no material adverse change in the prospects", "there has been no significant change in the financial performance" and "no significant change in the financial position" of GSBE, references in these statements to the "prospects", "financial performance" and "financial position" of GSBE are specifically to the respective ability of GSBE to meet its full payment obligations under the Securities in a timely manner. Material information about GSBE's prospects, financial

performance and financial position is included in the GSBE Annual Report 2022 and the GSBE Annual Report 2021, which are incorporated by reference pursuant to Article 19 of the Prospectus Regulation into this Registration Document (detailed information about the pages in the financial statements can be found in section "X. Information incorporated by reference").

## VIII. ADDITIONAL INFORMATION

### 1. Capitalisation

As of the date of this registration document GSBE's ordinary share capital amounts to EUR 328,642,800. GSBE's equity (German GAAP) as of 31 December 2022 amounted to EUR 8,827 million and was increased by EUR 3,260 million to EUR 12,087 million as of 25 January 2023. The sole shareholder of GSBE is Goldman Sachs Bank USA with its registered office in New York, New York. The ordinary share capital is recognized at nominal value and is fully paid in.

### 2. Credit Ratings

The credit ratings of GSBE<sup>1</sup> referred to in the Registration Document have been issued by Fitch, Inc. ("**Fitch**"), Moody's Investors Service, Inc. ("**Moody's**") and Standard & Poor's Ratings

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<sup>1</sup> The information for this rating has been extracted from information made available by each rating agency referred to below. GSBE confirms that such information has been accurately reproduced and that, so far as it is aware, and is able to ascertain from information published by such ratings agencies, no facts have been omitted which would render the reproduced information inaccurate or misleading. As at the date of the Registration Document the ratings for GSBE were:

*Short-term debt:*

*Fitch, Inc rating was F1: An 'F1' rating indicates the highest short-term credit quality and the strongest intrinsic capacity for timely payment of financial commitments; may have an added '+' to denote any exceptionally strong credit feature.*

*Moody's rating was P-1: 'P-1' issuers (or supporting institutions) rated Prime-1 have a superior ability to repay short-term debt obligations.*

*S&P rating was A-1: A short-term obligation rated 'A-1' is rated in the highest category by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitment on these obligations is extremely strong.*

*Long-term debt:*

*Fitch, Inc rating was A+: An 'A+' rating indicates high credit quality and denotes expectations of low default risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.*

*Moody's rating was A1: Obligations rated 'A' are considered upper-medium grade and are subject to low credit risk. Note: Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from 'Aa' through 'Caa'. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.*

Services, a division of The McGraw-Hill Companies, Inc. ("**S&P**"), none of which entities is established in the European Union or registered under Regulation (EC) No. 1060/2009 (as amended, the "**CRA Regulation**"). In general, European regulated investors are restricted from using a rating for regulatory purposes if such rating is not either (1) issued or validly endorsed by a credit rating agency established in the European Union and registered with the European Securities and Markets Authority ("**ESMA**") under the CRA Regulation) or (2) issued by a credit rating agency established outside the European Union which is certified under the CRA Regulation.

The EU affiliates of Fitch, Moody's and S&P are registered under the CRA Regulation. The ESMA has approved the endorsement by such EU affiliates of credit ratings issued by DBRS, Fitch, Moody's and S&P. Accordingly, credit ratings issued by Fitch, Moody's and S&P may be used for regulatory purposes in the EU.

Credit ratings may be adjusted over time, and there is no assurance that these credit ratings will be effective after the date of the Registration Document. A credit rating is not a recommendation to buy, sell or hold any securities.

## **IX. DOCUMENTS AVAILABLE**

During the validity of the Registration Document, the following documents may be inspected in electronic form on the following websites:

- the up-to-date Articles of Association of Goldman Sachs Bank Europe SE dated 1 February 2023 <https://www.goldmansachs.com/investor-relations/financials/subsidiary-financial-info/gsbe/2023/aoa-01-02-2023.pdf>;
- GSBE Annual Report 2022 <https://www.goldmansachs.com/investor-relations/financials/subsidiary-financial-info/gsbe/2022/gsbe-12-31-22-financial-statements-english.pdf>; and
- GSBE Annual Report 2021 <https://www.goldmansachs.com/investor-relations/financials/subsidiary-financial-info/gsbe/2021/gsbe-12-31-21-financial-statements-english.pdf>.

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*S&P rating was A+: An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong. The ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.*

Information contained on such websites shall not form part of this Registration Document and has not been scrutinized or approved by the Competent Authority, unless specified differently in section "X. Information incorporated by reference" below.

## **X. INFORMATION INCORPORATED BY REFERENCE**

The Registration Document should be read and construed in conjunction with the information incorporated by reference into this Registration Document. The information set forth under 2. (*Information*) below contained in the documents set forth under 1. (*Documents*) below which have been previously published and filed with the Competent Authority and which is hereby incorporated by reference into this Registration Document and deemed to form a part of this Registration Document.

### **1. Documents**

- GSBE Annual Report 2022
- GSBE Annual Report 2021

### **2. Information**

The table below sets out the relevant page references for the information incorporated into this Registration Document by reference. Information contained in the documents is incorporated by reference into this Registration Document. Insofar as reference is made to certain parts of the documents only these parts shall form part of the Registration Document and all other information contained in the documents is either not relevant for the investor or is covered elsewhere in this Registration Document.

<b>Information incorporated by reference</b>	<b>Page references in the Document*</b>	<b>Section and pages in this Registration Document</b>
<b><i>GSBE Annual Report 2022</i></b>		
Management Report for the Financial Year 2022	pages 3-29	VII.1. / 51
Balance Sheet	page 30	VII.1. / 51
Income Statement for the Financial Year 2022	page 31	VII.1. / 51
Statement of Cash Flows for the Financial Year 2022	page 32	VII.1. / 51
Notes to the Financial Statements	pages 33-42	VII.1. / 51
Independent auditors' report	pages 43-50	VII.1. / 51

***GSBE Annual Report 2021***

Management Report for the Financial Year 2021	pages 3-29	VII.1. / 51
Balance Sheet	page 30	VII.1. / 51
Income Statement for the Financial Year 2021	page 31	VII.1. / 51
Statement of Cash Flows for the Financial Year 2021	page 32	VII.1. / 51
Notes to the Financial Statements	pages 33-41	VII.1. / 51
Independent auditors' report	pages 42-48	VII.1. / 51

\* The page numbers referenced above relate to the order in which the pages appear in the PDF version of such document.

The GSBE Annual Report 2022 has been published on the website <https://www.goldmansachs.com/investor-relations/financials/index.html> and can be downloaded under the following link <https://www.goldmansachs.com/investor-relations/financials/subsidiary-financial-info/gsbe/2022/gsbe-12-31-22-financial-statements-english.pdf>.

The GSBE Annual Report 2021 has been published on the website <https://www.goldmansachs.com/investor-relations/financials/index.html> and can be downloaded under the following link <https://www.goldmansachs.com/investor-relations/financials/subsidiary-financial-info/gsbe/2021/gsbe-12-31-21-financial-statements-english.pdf>.