Deutsche Bank

DSI Japan Pillar 3
Disclosure at December 31, 2016

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Introduction

The purpose of this Report is to provide Pillar 3 disclosures of Deutsche Bank Securities Japan ("DSI") as required by the regulatory framework for capital and liquidity, established by the Basel Committee on Banking Supervision, also known as Basel III. On European level these are implemented in the disclosure requirements as laid down in Part Eight of the "Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms" (Capital Requirements Regulation, or "CRR") and the "Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" (Capital Requirements Directive 4, or "CRD 4").

A subsidiary is required to comply with the requirements in Article 13 CRR if at least one criterion mentioned in the list below has been met:

— Total Assets of € 30 billion or more (on individual or sub-consolidated basis)
— Five percent or more of our risk-weighted assets on group level
— 20 percent or more of the gross domestic product in its respective country, in which the subsidiary is located, but at least total assets of € five billion (on individual or sub-consolidated basis)
— Institutions directly supported by the European Stability Mechanism (ESM), European Financial Stability Facility (EFSF) or similar mechanisms
— Institutions belonging to the three largest institutions in their respective countries, in which the subsidiary is located (referring to the amount of total assets)
— Classification as "local systemically important institution" by the local competent authority

With more than € 30 billion total assets since 2016, DSI became a significant subsidiary of the Group.

DSI is a financial institution founded in Japan in July 2005, authorised and regulated by the Japan Financial Services Agency (JFSA), the Japan Securities Dealers Association, the Financial Futures Association of Japan and the Type II Financial Instruments Firms Association. DSI is a Japanese corporation and wholly-owned subsidiary of Deutsche Holdings S.A.R.L Luxembourg ('DHL'), which is wholly owned by Deutsche Bank AG (Deutsche Bank AG).

DSI is classified as a "Financial Instruments Business Operator" under the Japanese Financial Instruments and Exchange Act ("FIEA"), unless certain conditions apply, it is not required to have Pillar 3 disclosures prepared and audited under this regulation. As such the information provided in this Pillar 3 Report is unaudited.

It is important to note that being a broker/dealer type of institution, DSI does not engage in deposit taking or lending activities. As such, certain information which is available for credit institutions shall not be available in DSI's Pillar 3 disclosures in alignment with Deutsche Bank AG's disclosures. Furthermore, being locally incorporated, DSI's calculation of capital adequacy and liquidity coverage primarily follows the requirements set forth in FIEA, which formally follows Basel III framework while taking into consideration Japanese domestic market conditions, domestic financial institutions' prudential requirements among others. The difference which affect DSI's disclosures between Japanese local requirements and standards set forth in CRR and CRD 4 shall be noted in this report.

Deutsche Bank Group offers a wide variety of investment, financial and related products and services to private individuals, corporate entities and institutional clients around the world and organised under six business divisions as of 31st December 2016: Corporate and Investment Banking (CIB), Private, Wealth & Commercial Clients (PW&CC), Global Markets (GM), Asset Management (AM), Postbank and Non-Core Operations Unit (NCOU). CIB offers Trade, Finance & Cash Management, Institutional Cash and Securities Services, Equity and Debt Origination, Advisory and Loans Products. PW&CC comprises Private & Commercial Clients and Wealth Management. GM comprises Debt and Equity Sales and Trading. AM offers individuals and institutions traditional and alternative investments across all major asset classes. NCOU comprises capital-intensive assets that are not core to the strategy of the Group and under complete de-risking.

The current main products and services offered by DSI relate to Global Markets and include Fixed Income & Repos, Foreign Exchange, Interest Rate Derivatives as well as Securities Lending and Equity Derivatives.

DSI is made up of several supporting infrastructure functions namely: risk, finance, compliance, legal, human resources, and research.

DSI aims to be fully integrated into the Deutsche Bank Group operations, policies and procedures as part of its core risk management framework as further elaborated in the next sections.

DSI publishes the Pillar 3 disclosure report on a yearly basis in accordance with CRR article 13 paragraph 1 and posts the disclosure report on the Group website below

https://www.db.com/ir/en/regulatory-reporting.htm

DSI Pillar 3 disclosure report is on a stand-alone basis.

Risk Management Framework and Governance

Risk Management Framework

The risk management at DSI is integral to Deutsche Bank Group's risk management framework and processes.

DSI's business model requires to identify, assess, measure, aggregate and manage risks, and to allocate capital among its businesses. Risk and capital are managed via a framework of principles, organizational structures and measurement and monitoring processes that are closely aligned with the activities and organizational structure of DSI.

— Core risk management responsibilities are embedded in the DSI Board and delegated to senior risk management committees responsible for execution and oversight.
— We operate a Three lines of Defense ("3LoD") risk management model. The 1st Line of Defense ("1st LoD") are all the business divisions and service providing infrastructure areas (within Chief Operating Office) who are the "owners" of the risks. The 2nd Line of Defense ("2nd LoD") are all the independent risk and control infrastructure functions. The 3rd Line of Defense ("3rd LoD") is Group Audit, which assures the effectiveness of our controls. All 3LoD are independent of one another and accountable for maintaining structures that ensure adherence to the designed principles at all levels.
— Risk strategy is approved by the DSI Board on an annual basis and is defined based on the Risk Appetite and Strategic and Capital Plan in order to align risk, capital and performance targets.
— Cross-risk analysis reviews are conducted to validate that sound risk management practices and a holistic awareness of risk exist.
— All material risk types, including credit risk, market risk, operational risk, liquidity risk, business risk and reputational risk, are centrally managed via risk management processes . Modelling and measurement approaches for quantifying risk and capital demand are implemented across material risk types. Reputational risk is implicitly covered in Deutsche Bank Group's economic capital framework, primarily within operational and strategic risk.
— Monitoring, stress testing tools and escalation processes are in place for key risk, capital and liquidity thresholds and metrics.
— Systems, processes and policies are critical components of our risk management capability. DSI has a sound & efficient risk infrastructure in place
— Recovery plan is managed via a centralized process. Deutsche Bank Group Recovery planning provides the escalation path for crisis management governance and supplies senior management with a list of actions designed to improve the capital and liquidity positions in a stress event.
— At the Group level, resolution planning is the responsibility of the resolution authority, the Single Resolution Board ("SRB"). The SRB provides a strategy to manage Deutsche Bank in case of default. The strategy is designed to prevent major disruptions to the financial system or the wider economy through maintaining critical services.

Risk Governance

DSI's operations are regulated and supervised by the Japan Financial Services Agency ("JFSA"). Such regulation focuses on licensing, capital adequacy, liquidity, risk concentration, conduct of business as well as organizational and reporting requirements. The European Central Bank in connection with the competent authorities of EU members which joined the Single Supervisory Mechanism via the Joint Supervisory Team act in cooperation as Deutsche Bank Group primary supervisors to monitor the Group's compliance with the German Banking Act and other applicable laws and regulations as well as the CRR/CRD 4 framework and respective implementations into German law.

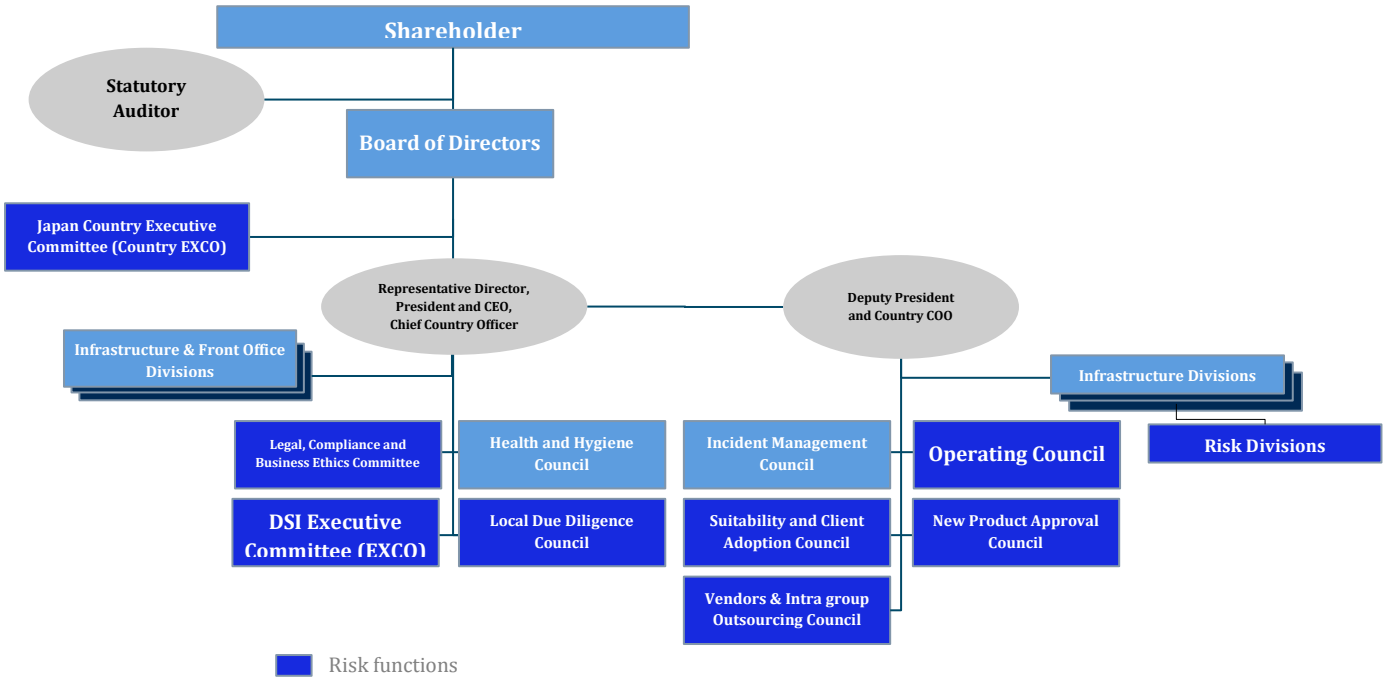
Several layers of management provide cohesive risk governance.

The DSI Board of Directors is aware and regularly informed on special developments in its risk situation, risk management and risk controlling, as well as on its reputation and material litigation cases.

The DSI Board of Directors is responsible for managing DSI in accordance with the law, the Articles of Association and its Terms of Reference with the objective of creating sustainable value in the interest of the company, thus taking into consideration the interests of the shareholders, employees and other stakeholders.

The DSI Board of Directors is responsible for establishing a proper business organization, encompassing an appropriate and effective risk management.

The following functional committees and councils are central to the management of risk at DSI:



DSI's Country Operating Officer has country-wide responsibility for the management of all credit, market and operational risks as well as for the comprehensive control of risk.

Risk Culture

The risk culture at DSI is fully integrated in Deutsche Bank Group's risk culture framework and processes. This is underpinned in the below principles and practices.

Deutsche Bank Group seeks to promote a strong risk culture throughout the organization. It aims to help reinforce the Bank's resilience by encouraging a holistic approach to the management of risk and return throughout the organization as well as the effective management of Deutsche Bank Group's risk, capital and reputational profile. Deutsche Bank Group actively takes risks in connection with its business and as such the following principles define the risk culture within Deutsche Bank Group:

— Risk is taken within a defined risk appetite;
— Every risk taken needs to be approved within the risk management framework;
— Risk taken needs to be adequately compensated; and
— Risk should be continuously monitored and managed.

Employees at all levels are responsible for the management and escalation of risks. All employees are expected to exhibit behaviors that support a strong risk culture. To promote this Deutsche Bank Group policies require that behavior assessment is incorporated into our performance assessment and compensation processes. Deutsche Bank Group communicated the following risk culture behaviors through various communication vehicles:

— Being fully responsible for our risks;
— Being rigorous, forward looking and comprehensive in the assessment of risk;
— Inviting, providing and respecting challenges;
— Trouble shooting collectively; and
— Placing Deutsche Bank and its reputation at the heart of all decisions.

These behaviours are reinforced through a comprehensive risk culture training programme, as well as targeted communications and awareness campaigns.

Risk Appetite Framework

Risk appetite expresses the level of risk that we are willing to assume within our risk capacity in order to achieve our business objectives, as defined by a set of minimum quantitative metrics and qualitative statements. Risk capacity is defined as the maximum level of risk we can assume before breaching regulatory capital requirements and liquidity needs and our obligations to stakeholders.

Risk appetite is an integral element in our business planning processes via our Business and Risk Strategy, to promote the appropriate alignment of risk, capital and performance targets, while at the same time considering risk capacity and appetite constraints from both financial and non-financial risks. Compliance of plan with our risk appetite and capacity is also tested under stressed market conditions. Top-down risk appetite serves as the limit for risk-taking for the bottom-up planning from the business functions.

DSI's Risk Appetite articulates the overall tone from the top in pursuing risk across DSI and supports Deutsche Bank Group's risk culture, in reinforcing the bank's holistic risk management practices.

DSI assigns key risk appetite metrics that are sensitive to the material risks to which the bank is exposed to and which are able to function as key indicators of the bank's financial health in terms of liquidity and capital requirements. These metrics are Capital Adequacy Ratio and Liquidity Coverage Ratio (LCR in consolidation with Deutsche Bank AG Tokyo Branch).

In order to determine risk appetite and capacity, thresholds are set on a forward looking basis and the escalation mechanism is defined for further action. The levels chosen reflect DSI's strategic focus and business plan as well as additional internal and external stakeholders.

In the event that the desired risk appetite is breached under either normal or stress scenarios, an escalation is made to the Japan Country Executive Committee ("Exco") which has to review and decide if further escalations to the Group and/or mitigating actions are required to bring risk profile back to the desired risk appetite range

The risk appetite framework is approved by the local management board. Amendments to the risk appetite framework at DSI must be approved by the Japan Country Exco.

Risk and Capital Plan

Capital and Strategic Planning

Capital management represents a fundamental risk management process at DSI as effective management of the capital base ensures the overall financial stability of the firm through a forward-looking adequacy assessment which provides protection to absorb the potential impacts of material unforeseen and potentially adverse events on DSI's operations and its overall financial profile. DSI focuses on long-term stability, positioning itself to build and invest in market-leading businesses, even in a highly stressed environment.

DSI's capital plan is an integral part of the overall strategic plan which also contains the risk and capital demand plan. The strategic plan is based on assumptions regarding the future development of the banking market and revenue pools, expected client behaviours and needs and DSI's relative strengths and capabilities to serve the clients in a competitive environment.

The local Board of Directors defines the local Business and Risk Strategy ("BRS"), including the Risk Appetite, that are aligned to DSI strategic plans as well as are in line with local regulatory requirements. The local BRS articulates strategies by business units and risk types as well as any IT or infrastructure investment required to support the business strategies. These reflect strategic priorities, strategic initiatives and organisational structural changes (infrastructure capacities, human resources and outsourced activities, etc) that are necessary to achieve the objectives and ensure compliance with current and upcoming regulatory requirements. The local BRS translates DSI's long-term strategy into measurable short to mid-term financial targets which aims at identifying optimal growth options considering the risk involved and the allocation of available capital resources to promote sustainable performance.

The planning process allows DSI to:

— Set earnings and key risk and capital adequacy assessment in line with the Bank's strategic focus and business plans; and
— Assess DSI's capital adequacy with regard to internal and external requirements (i.e. regulatory and economic capital)

To ensure alignment with the Group plan and achieve a harmonized and pro-active capital planning with the Group strategies DSI local BRS plans are linked with Deutsche Bank Group general divisional planning assumptions.

The Chief Operating Officer ("COO") oversees the communication and implementation of the capital and strategic planning within the entity ensuring that the risk profile remains within the scope of the risk strategy determined by the Board of Directors, which is monitored via the Risk and Capital Profile (RCP) report on a quarterly basis.

The capital plan of DSI is presented to the Group Investment Committee ("GIC") for consideration. The GIC is mandated by the Group management board to review all capital requests (incl. profit retentions) for subsidiaries and branches. Any subsequent capital measure will be benchmarked against the GIC-presented capital plan, deviations will be flagged and reasons for deviations provided.

Internal Capital Adequacy Assessment Process

The Internal Capital Adequacy Assessment Process ("ICAAP") requires banks to identify and assess all relevant risks, and to maintain sufficient capital to face these risks and apply appropriate risk-management techniques to maintain adequate capitalization on an ongoing and forward looking basis, i.e., internal capital supply to exceed internal capital demand (figures are described in more detail in the section "Economic Capital").

We maintain compliance with the ICAAP as required under Pillar 2 of Basel III through an enterprise risk management and governance framework, methodologies, processes and infrastructure.

DSI's ICAAP framework is aligned to the Group approach. DSI calculates and monitors its capital adequacy position against both Basel Pillar 1 and Pillar 2 targets.

DSI recognises the importance of using the ICAAP as part of its decision-making processes. As such ICAAP is embedded into business as usual activities, for example:

— DSI's Economic Capital adequacy is monitored on a quarterly basis, and reported to the local Operational Council ("OpCo") and local Board of Directors in the Risk and Capital Profile ("RCP") report. Capital projections are reviewed and approved by the local OpCo and local Board of Directors on those occasions, if necessary. The RCP is also used by the local OpCo and Management Board as a key tool to analyse, monitor and report DSI's risk and capital profile. It is also leveraged to oversee on a quarterly basis the development of key risk metrics compared to the established risk appetite thresholds and if necessary, escalate for management actions;
— The risk management function continually analyses and monitors the risk profile of the business to ensure adherence to the approved plan, and to the thresholds set for risk appetite metrics;
— The Risk Management Framework provides documentation of the risk governance and management framework of DSI by main risk types as well as the overall risk management practices in place at DSI; and
— The Business and Risk Strategy provides forward-looking aspects of DSI's business and risk strategy, broken down by key business activities. This overview supports the decision making processes of the OpCo and local Board of Directors over the course of the year.

Stress Testing

The COO is responsible to initiate and properly document remedial measures and mitigating actions (including explanations that justify the credibility and feasibility of those actions) based on the stress test results under consideration of the risk appetite, if deemed appropriate or necessary.

DSI subjects all risk types covered under its economic capital ("EC") concept (Pillar 2 risks), as well as liquidity risk, to regular stress tests. At Group level, the Stress Testing Committee is responsible for aligning scenario definitions between Deutsche Bank Group and individual legal entities according to the Global Stress Testing Policy.

Credit risk stress testing

Credit risk stress tests of economic capital demand are based on the Group Credit Risk Stress Test methodology (Global Downturn or another macroeconomic stress scenario).

Deutsche Bank Group applies the migration matrix (global downturn scenario and macroeconomic stress scenario) to stress test its credit risk risk weighted assets ("RWA"). The migration matrix is an output from the Group Credit Stress Test ("GCST") which is the macroeconomic downturn applied on the bank's credit portfolio using the internal EC model to calculate rating downgrade impacts. By applying regulatory risk weights to the exposure of the derived portfolio, stressed RWA are calculated.

Liquidity risk stress testing

DSI is fully integrated into the Group's liquidity risk management framework, and as such performs local liquidity stress tests on a regular basis. The local stress test framework is derived from Deutsche Bank's global stress testing framework, but could be adjusted to cover local market peculiarities. Local stress test results are computed based on the standards described in the Group Liquidity Stress Testing Methodology. Stress parameters are adjusted to cover local market and product specifications and are discussed at the local Asset and Liability Committee (ALCO). The parameters are locally verified by Treasury. Stress tests are discussed regularly in the local ALCO, and brought to the attention of the local OpCo and the local Board of Directors.

Market risk stress testing

Stress testing is a key risk management technique, which evaluates the potential effects of extreme market events and extreme movements in individual risk factors. It is one of the core quantitative tools used to assess the market risk of the Bank's positions and follows the global stress testing framework. and its primary application is within the EC framework. The scenario-based approach in stress testing is complementary to statistical model approaches as for value at risk ("VaR"). Market Risk Management ("MRM") performs several types of stress testing to capture the variety of risks: individual business-level stress tests, MRM portfolio stress testing (e.g. Portfolio Stress Testing (PST), Event Risk Scenarios (ERS)), and Group-wide stress testing. The results are shared locally at weekly risk meetings and are also reported to the OpCo.

Operational risk stress testing

DSI is fully integrated into the Group's operational risk management framework. Group Operational Risk translates the Group operational risk stress impact into Deutsche Bank operational risk factors for EC and Regulatory Capital ("RC") respectively. The stressed operational risk factors for EC and RC are calculated on a quarterly basis by translating the macro economic assumptions of the Global Downturn scenario into expert based 'workable' operational risk assumptions and applied on legal entity level.

Local stress testing of Operational Risk is not required.

Risk and Capital Management

Risk Inventory

DSI faces a variety of risks as a result of the business activities; the main risk types include credit risk, market risk, business risk, liquidity risk, operational risk, reputational risk as described in the following sections below. Credit-, market-, operational-, strategic- and liquidity risks are pre-assessed to be material on Group level according to MaRisk and accordingly, classified as material whenever they are identified as entity relevant risk types. Business risk, reputational risk and operational risk are termed as fundamental risk by the local regulator.

DSI documents all entity relevant identified risk on a sub-risk type level. Any sub-risk types of the risk inventory roll up to a main risk type. Each risk type may include several associated sub-risk types.

The overall process (annual and ad hoc) is coordinated jointly by regional management and risk management. Through existing processes (incl. Non-Financial Risk Control Assessment and New Product Approval), the involved function and business identify risks or changes to the risk profile and the materiality.

Regional management is responsible to implement the risk identification process within each risk management function. The risk identification process is performed by the various risk and infrastructure functions under the leadership of the COO. Each risk management function starts the risk identification phase to build up the list of risks that the entity is exposed to, which is then challenged by various risk and infrastructure functions to foster cross-risk discussions.

On an annual basis, the identified risks are monitored and reported in the ICAAP Business and Risk Strategy report.

The identified risks are also monitored on an ongoing basis, and at least monthly reported in the risk reports from the risk functions to the DSI OpCo

Credit Risk Management

Credit risk arises from all transactions where actual, contingent or potential claims against any counterparty, borrower or obligor (which we refer to collectively as “counterparties”) exist, including those claims that DSI plans to distribute.

The Bank understands the below dimensions as key drivers for credit risk:

— "Default Risk", the most significant element of credit risk, is the risk that counterparties fail to meet contractual obligations in relation to the claims described above;
— "Country Risk" arising from a country’s propensity to economic and political disruption. It therefore relates to the likelihood that changes in the business environment will occur that reduce the viability of doing business in the country or region. Country Risk shall mean the risk that the Bank may suffer a loss due to possible deterioration of economic conditions; political and social upheaval; nationalisation and expropriation of assets; government repudiation of external indebtedness; exchange controls or currency depreciation or devaluation in any given country;
— “Industry Risk” being the risk of adverse developments in the operating environment for a specific industry segment leading to a deterioration in the financial profile of counterparties operating in that segment and resulting in increased credit risk across this portfolio of counterparties.
— “Product Risk” captures product-specific credit risk of transactions that could arise with respect to specific borrowers or group of borrowers. It takes into account whether obligations have similar risk characteristics and market place behaviours.

DSI manages credit risk on the basis of policies and guidelines set by Group Credit Risk Management (“CRM”), an independent risk management function organised in alignment with the business divisions of the Bank.

DSI CRM is based on the following principles:

— Accept risk only with creditworthy clients based on proper client due diligence
— Manage concentration risk at counterparty, product, country and industry level. Actively mitigate concentration risk through collateralization, hedging and/or distribution
— Allocate CR appetite by considering sustainable risk/return

CRM is organised globally and carries out risk identification, assessment, management, monitoring and reporting of credit risks. The CRM department is independent from business. Accordingly, DSI adopts the credit policies of Deutsche Bank Group and the COO is responsible for establishing local policies and procedures to ensure compliance with DB Group principles.

Credit Risk Measurement

Under JFSA requirements, such as among others Japan FIEA and related Cabinet Office Ordinance on Financial Instruments Business, for local regulatory capital, credit risk amount is defined as counterparty risk amount equivalent to possible risks which may occur due to the default in performance of contracts by the counterparties to transactions or any other ground as calculated in accordance with the formula prescribed by JFSA.DSI calculates and measures the regulatory capital requirements for credit risk using the standardized approach (credit risk exposure times risk weight) in line with JFSA requirements.

For Pillar 2 capital, DSI adopts the credit risk economic capital concept from Deutsche Bank Group which measures the amount of capital needed to absorb very severe, unexpected losses arising from our exposures over the period of one year. Further information on the Group credit risk EC quantification can be found in the Group's annual Pillar 3 Report under section "Credit Risk Economic Capital Model".

Credit Risk Mitigation Techniques

In addition to determining counterparty credit quality and the risk appetite, DSI also uses various credit risk mitigation techniques to optimize credit exposure and reduce potential credit losses. Credit risk mitigants are applied in the following forms:

— Comprehensive and enforceable credit documentation with adequate terms and conditions.
— Collateral held as security to reduce losses by increasing the recovery of obligations.
— Risk transfers, which shift the probability of default risk of an obligor to a third party including hedging executed by our Credit Portfolio Strategies Group.
— Netting and collateral arrangements which reduce the credit exposure from derivatives and repo- and repo-style transactions.

Collateral Held as Security

DSI regularly agrees on collateral to be received from or to be provided to customers in contracts that are subject to credit risk. Collateral is security in the form of an asset or third-party obligation that serves to mitigate the inherent risk of credit loss in an exposure, by either substituting the borrower default risk or improving recoveries in the event of a default. While collateral can be an alternative source of repayment, it generally does not replace the necessity of high quality underwriting standards.

We segregate collateral received into the following two types:

— Financial and other collateral, which enables us to recover all or part of the outstanding exposure by liquidating the collateral asset provided, in cases where the borrower is unable or unwilling to fulfill its primary obligations. Cash collateral, securities (equity, bonds), and collateral assignments of other claims or inventory, equipment (i.e., plant, machinery and aircraft) and real estate typically fall into this category.
— Guarantee collateral, which complements the borrower's ability to fulfill its obligation under the legal contract and as such is provided by third parties. Letters of credit, insurance contracts, export credit insurance, guarantees, credit derivatives and risk participations typically fall into this category.

Our processes seek to ensure that the collateral we accept for risk mitigation purposes is of high quality. This includes seeking to have in place legally effective and enforceable documentation for realizable and measureable collateral assets which are evaluated regularly by dedicated teams. The assessment of the suitability of collateral for a specific transaction is part of the credit decision and must be undertaken in a conservative way, including collateral haircuts that are applied. We have collateral type specific haircuts in place which are regularly reviewed and approved. In this regard, we strive to avoid "wrong-way" risk characteristics where the borrower's counterparty risk is positively correlated with the risk of deterioration in the collateral value. For guarantee collateral, the process for the analysis of the guarantor's creditworthiness is aligned to the credit assessment process for borrowers.

Netting and Collateral Arrangements for Derivatives and Securities Financing Transactions

Netting is applicable to both exchange traded derivatives and over-the-counter ("OTC") derivative transactions. Netting is also applied to securities financing transactions as far as documentation, structure and nature of the risk mitigation allow netting with the underlying credit risk.

In order to reduce the credit risk resulting from OTC derivative transactions, where CCP clearing is not available, DSI regularly seeks the execution of standard master agreements (such as master agreements for derivatives published by the International Swaps and Derivatives Association, Inc. ("ISDA") with our counterparts. A master agreement allows for the close-out netting of rights and obligations arising under derivative transactions that have been entered into under such a master agreement upon the counterparty's default, resulting in a single net claim owed by or to the counterparty. For parts of the derivatives business (i.e., foreign exchange transactions) we also enter into master agreements under which payment netting applies in respect to transactions covered by such master agreements, reducing our settlement risk. In our risk measurement and risk assessment processes we apply close-out netting only to the extent we have satisfied ourselves of the legal validity and enforceability of the master agreement in all relevant jurisdictions.

Also, we enter into credit support annexes ("CSA") to master agreements in order to further reduce our derivatives-related credit risk. These annexes generally provide risk mitigation through periodic, usually daily, margining of the covered exposure. The CSAs also provide for the right to terminate the related derivative transactions upon the counterparty's failure to honor a margin call. As with netting, when we believe the annex is enforceable, we reflect this in our exposure measurement.

Certain CSAs to master agreements provide for rating dependent triggers, where additional collateral must be transferred if a party's rating is downgraded. We also enter into master agreements that provide for an additional termination event upon a party's rating downgrade. These downgrading provisions in CSAs and master agreements usually apply to both parties but may also apply to us only. We analyze and monitor our potential contingent payment obligations resulting from a rating downgrade in our stress testing approach for liquidity risk on an ongoing basis.

Concentrations within Credit Risk Mitigation

Concentrations within credit risk mitigations taken may occur if a number of guarantors and credit derivative providers with similar economic characteristics are engaged in comparable activities with changes in economic or industry conditions affecting their ability to meet contractual obligations. We use a range of quantitative tools and metrics to monitor our credit risk mitigating activities. These also include monitoring of potential concentrations within collateral types supported by dedicated stress tests.

Asset Quality

Non-Accrual Assets

Assets are placed on non-accrual status if, either, the asset has been in default as to payment of principal or interest for 90 days or more and the asset is neither well secured nor in the process of collection, or, the accrual of interest should be ceased according to CRM's judgment as to collectability of contractual cash flows, i.e. when doubt exists as to the collectability of the remaining recorded investment in an asset then non-accrual status should be applied.

When an asset is placed on non-accrual status, the recorded investment in the asset includes accrued interest. Cash receipts of interest on non-accrual assets are recorded as a reduction of principal. All non-accrual assets must be assigned a default rating (regulatory and internal) to remain in line with the Bank's current global guidelines.

Past Due Assets

Assets are considered to be past due if contractually agreed payments of principal and/or interest remain unpaid by the obligor, except if those assets are acquired through consolidation. The latter are considered to be past due if payments of principal and/or interest, which were expected at a certain payment date at the time of the initial consolidation of the assets, are unpaid by the obligor.

Troubled Asset Restructuring

Assets that have been renegotiated in such a way that DSI, for economic or legal reasons related to the obligor's financial difficulties, grants a concession to the obligor that it would not otherwise consider, are to be disclosed as Troubled Asset Restructurings.

A troubled asset restructuring may include one or any combination of the following three forms when the obligor is in financial difficulty:

- Modification of terms of an obligation, such as one or a combination of any of the following;
  - Reduction (absolute or contingent) of the stated interest rate for the remaining original life of the obligation;
  - Extension of the maturity date or dates at a stated interest rate lower than the current market rate for new obligation with similar risk;
  - Reduction (absolute or contingent) of the face amount or maturity amount (principal amount) of the obligation as stated in the documentation;
  - Reduction (absolute or contingent) of accrued interest.
- Transfer of assets to the creditor to fully or partially satisfy the obligation
- Issuing or granting of an equity interest to the creditor by the obligor to satisfy an obligation fully or partially, except for convertible debt.

Impaired Assets

Credit Risk Management regularly assesses whether there is objective evidence that an asset or group of assets is impaired. An asset or group of assets is impaired and impairment losses are incurred if:

- There is objective evidence of impairment as a result of a loss event that occurred after the initial recognition of the asset and up to the balance sheet date ("a loss event"). When making our assessment we consider information on such events that is reasonably available up to the date the financial statements are authorized for issuance in line with the requirements of IAS 10;
- the loss event had an impact on the estimated future cash flows of the financial asset or the group of financial assets, and
- A reliable estimate of the loss amount can be made.

Credit Risk Management's loss assessments are subject to regular review in collaboration with Group Finance. The results of this review are reported to and approved by Group Finance and Risk Senior Management.

Impairment Loss and Allowance for Credit Losses

If there is evidence of impairment the impairment loss is generally calculated on the basis of discounted expected cash flows using the original effective interest rate of the asset. If the terms of an asset are renegotiated or otherwise modified because of financial difficulties of the borrower without qualifying for a derecognition of the asset, the impairment loss is measured using the original effective interest rate before modification of terms. We reduce the carrying amount of the impaired sset by the use of an allowance account and recognize the amount of the loss in the consolidated statement of income as a component of the provision for credit losses. We record increases to our allowance for credit losses as an increase of the provision for credit losses in our income statement. Charge-offs reduce our allowance while recoveries, if any, are credited to the allowance account. If we determine that we no longer require allowances which we have previously established, we decrease our allowance and record the amount as a reduction of the provision for credit losses in our income statement. When it is considered that there is no realistic prospect of recovery and all collateral has been realized or transferred to us, the asset and any associated allowance for credit losses is charged off (i.e. the asset and related allowance for credit losses are removed from balance sheet).

Our collectively assessed allowance for non-impaired assets reflects allowances to cover for incurred losses that have neither been individually identified nor provided for as part of the impairment assessment.

Derivatives - Credit Valuation Adjustment

We establish counterparty Credit Valuation Adjustments ("CVA") for OTC derivative transactions to cover expected credit losses. The adjustment amount is determined by assessing the potential credit exposure to a given counterparty and taking into account any collateral held, the effect of any relevant netting arrangements, expected loss given default and the credit risk, based on available market information, including CDS spreads.

Details on impaired assets, allowances for credit losses and non-impaired past due assets can be found in the Credit Risk Exposure section below.

Market Risk Management

Market risks assumed by DSI are managed by the Market Risk Management ("MRM") department as part of MRM's global risk management framework.

MRM distinguishes between three substantially different types of market risk: trading market risk, traded default risk, and non-trading market risk.

— Trading market risk arises primarily through market-making activities. This involves taking positions in debt, equity, foreign exchange, other securities and commodities as well as in equivalent derivatives.
— Traded default risk arising from defaults and rating migrations relating to trading instruments.
— Non-trading market risk arises from market movements, primarily outside the activities of the trading units, in our banking book and from off-balance sheet items. This includes interest rate risk; credit spread risk, investment risk and foreign exchange risk as well as market risk arising from our pension schemes, guaranteed funds and equity compensation. Non-trading market risk also includes risk from the modelling of client deposits as well as savings and loan products.

Market Risk Measurement

Under JFSA requirements, such as among others Japan FIEA and related Cabinet Office Ordinance on Financial Instruments Business, for local regulatory capital, market risk amount is defined as market risk amount equivalent to possible risks which may occur due to the fluctuations in the prices of the securities held or other reasons as calculated in accordance with the formula prescribed by JFSA.DSI calculates and measures the regulatory capital requirements for market risk using the standardised approach by risk category in line with JFSA requirements.

For Pillar 2 capital, DSI adopts the market risk economic capital concept from Deutsche Bank Group which measures the amount of capital needed to absorb very severe, unexpected losses arising from our exposures over the period of one year. Further information on the Group market risk EC quantification can be found in the Group's annual Pillar 3 Report under section "Market Risk Economic Capital Model".

Market Risk Monitoring of Limits and Concentrations

As a key control function, MRM ensures that Deutsche Bank Group remains within the overall risk appetite set out by the Management Board by establishing limits and monitoring the levels of Market Risk ("MR"). MRM continuously monitors Deutsche BankGroup's market risk levels including when they are below the relevant risk limit through the use of the key Market Risk Management metrics. Limits may be, and in certain cases are required to be, set against any of these metrics.

DSI is integrated into Deutsche Bank Group's global limit system, which is defined, monitored and controlled by MRM.

Market risk measures are calculated on a daily basis by Market Risk Control ("MRC") centrally and exposures monitored against the established limits, if applicable. Risk reports are sent daily to businesses as well as submitted to DSI OPCO on a monthly basis.

Market risk concentrations refer to concentrations in asset classes, single name, issuer, equity delta/ currencies, and balance sheet items. Concentration risk arises when positions with similar characteristics increase to a significant size, such that adverse development of a limited number of risk factors could lead to a significant loss for the Bank.

MR Managers are responsible for identifying, monitoring and managing these risks considering absolute size, liquidity (time to exit position under normal and under distressed market conditions) and the level of concentrations in crowded trades. Concentration risks are managed through the use of limits. In all cases, there is constant dialogue with Front Office Senior Management.

It is the responsibility of each trading desk and business unit to manage their risk exposures, adhere to the approved exposure limits and hence to mitigate market risks appropriately. This can be achieved by using different hedging techniques to reduce relevant exposure. The ultimate responsibility for implementing any required hedging strategy lies with individual business unit management or, in the case of macro-hedges, with central management. MRM can undertake a review of the hedging strategies that are put in place in order to ensure that the risks of the underlying exposures and the hedging positions are fully understood and adequately represented in the systems.

Operational Risk Management (fundamental risk in local regulation)

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. It includes legal risk, and together with business and reputational risk falls broadly under the term fundamental risk as per local regulatory definition.

DSI manages operational risk based on a Group-wide consistent framework that enables Deutsche Bank Group to determine the OR profile in comparison to the risk appetite and systematically identify OR themes and to define appropriate risk mitigation measures and priorities.

Group Operational Risk Management ("Group ORM") define the Group Operational Risk Management Framework ("GORMF") that ensures that Operational Risks are appropriately identified, assessed, mitigated, monitored, reported and escalated at Deutsche Bank.

— The GORMF supports the day-to-day management of Operational Risks ("OR"), which is the primary responsibility of the Business Division and the service providing Infrastructure Functions (GTO and Corporate Services) and
— Operational Risk Management ("ORM") independently monitors, reviews and assesses material operational risks and oversees the consistent application of the GORMF across the Bank.

The GORMF defines the consistent management of risk across all operational risk types and is comprised of a numbers of processes:

— holistic and efficient risk mitigation/risk acceptance within the defined operational risk appetite;
— timely and complete OR identification/ loss capture though continuous collection of internal operational risk events and external loss information. Internal scenarios are also developed to complete the Bank's Risk Profile;
— timely, accurate and complete assessment of risks and controls mainly through a comprehensive Risk and Control Assessment ("R&CA"), Lessons Learned and Read Across processes;
— effective risk and mitigation monitoring; and
— timely, accurate and effective risk reporting/escalation.

DSI is covered within the existing GORMF. This GORMF governs issues such as reporting, recording and escalation of OR events and losses. At local level, the Management Board and local OPCO are responsible for adequate monitoring and reporting of operational risks.

Operational Risk Measurement (Fundamental Risk in local regulation)

Under JFSA requirements, such as among others Japan FIEA and related Cabinet Office Ordinance on Financial Instruments Business, for local regulatory capital, operational risk amount is defined as fundamental risk amount equivalent to possible risks which may occur in the course of executing ordinary business, such as errors in business handling, as calculated in accordance with the formula prescribed by JFSA.DSI calculates and measures the regulatory capital requirements for operational risk using the basic indicator approach (one quarter of the annual operating expenses) in line with JFSA requirements.

For Pillar 2 capital, DSI adopts the OR economic capital concept from Deutsche Bank Group which is based on the Advanced Measurement Approach ("AMA"). As inputs into the AMA model, Deutsche Bank Group uses internal loss data as well as external loss data provided by the industry consortium ORX (Operational Riskdata eXchange Association). Further information on the Group operational risk EC quantification can be found in the Group's annual Pillar 3 report under section "Operational Risk Economic Capital Model".

Operational Risk Monitoring of Limits and Concentrations

The GORMF provides a basis for the determination of the DSI OR Profile to systematically identify OR themes and concentrations, and to define risk mitigating measures and priorities. Key Risk Indicators are used to monitor the Operational Risk Profile and allow the monitoring of DSI's control culture and business environment. They facilitate the forward looking management of operational risks based on early warning signals.

All OR events above the defined threshold must be entered in the established db Incident Reporting System ("dbIRS"). dbIRS provides a standard reporting functionality to inform local OpCO on OR developments, relevant losses and areas of risk. A DSI ORM Report representing key operational risk trends is prepared on a regular basis and reviewed at the local OpCO.

Once operational risks are identified and assessed, a determination of the most appropriate action is made based on an evaluation of remediation costs and potential impacts, resulting in three possible mitigating strategies:

— Self-Identified Issue: control gaps or weaknesses are supported by remediation actions and monitored to resolution in a timely manner
— Risk Acceptance: where remediation is not feasible, having appropriate regard to cost of control and potential impacts, risks may be accepted subject to appropriate evaluation and governance
— Ceasing or reducing business activities

As part of Deutsche Bank Group's operational risk mitigation, insurance policies have been entered into with external providers. These policies cover a variety of risks including criminal acts by employees, professional liability, securities loss and directors' and officers' liability. The insurance covers Deutsche Bank Group and all majority owned subsidiaries.

Liquidity Risk Management

Liquidity risk is the risk arising from our potential inability to meet all payment obligations when they come due or only being able to meet these obligations at excessive costs.

Management of liquidity risk at DSI is fully integrated into the Group's Liquidity risk management framework.

The principal objective of liquidity management is to ensure DSI's ability at all times to meet payments obligations when they come due.

DSI manages liquidity risk in line with the overall Group's liquidity risk management framework and according to policies and guidelines set locally by Treasury. The Internal Liquidity Adequacy Assessment Policy ("ILAAP"), which is the basis for the local liquidity policy, is approved by the Management Board of Deutsche Bank and describes the Group's liquidity risk management framework and also the underlying methodology papers.

Liquidity Risk Monitoring of Limits and Concentrations

Several tools and metrics are used to measure and manage liquidity and funding risk at DSI level

— The Liquidity Coverage Ratio ("LCR"): The Liquidity Coverage Ratio is a pre-defined regulatory stress metric.
— Intra-group funding lines and utilisation: DSI obtains funding lines from other Deutsche Bank Group entities. Deutsche Bank Group performs appropriate stress tests to ensure sufficient liquidity to DSI can be provided – even if severe stress events occur. This process ensures that lines, granted to legal entities, are a reliable funding source under any circumstances;
— Local liquidity stress testing: local stress testing for liquidity risk is periodically performed in line with the overall concept described in the Global Liquidity Stress Testing Methodology as developed by Deutsche Bank Group. These stress testing gives the analysis of DSI's ability to withstand predefined stress events.
— Funding Matrix is constructed to determine and analyse the structural funding profile on the longer end. For this purpose, all funding relevant items are analysed and bucketed according to their contractual or modelled maturity over a time horizon of above one year out to year 10. From the cumulative term profile, the excess or shortfall of term liabilities and assets in each time bucket can be determined, serving as input for the discussion of potential action to fund the balance sheet.

Key liquidity ratios and figures are monitored in the ALCO report on a regular basis and form basis of the quarterly RCP report.

Liquidity risk concentrations can be found along products, regions, currencies, tenors and clients, and may arise from DSI's potential inability to meet all payment obligations when due, or to only meet these obligations at excessive costs.

Treasury may decide to temporarily reduce limits in the event of contingency situations to reduce potential liquidity risk. Additional local contingency measures form part of a local contingency plan.

Business (Strategic) Risk Management

DSI adopts the strategic risk management framework set by Group as explained below.

Strategic risk is a material risk type that may arise from our failure to execute our strategy, our failure to position the Bank strategically, or our ineffective response to material negative plan deviations caused by external or internal factors.

The management of strategic risk involves minimizing potential operating income shortfall that can have an adverse impact on capital if it cannot be compensated by cost reduction.

Business (Strategic) Risk Measurement

Deutsche Bank Group measures economic capital for business risk, which includes strategic risk and tax risk. The economic capital for strategic risk is based on a model calculating an earnings distribution on Deutsche Bank Group level. Important input parameters of the EC model are planned revenues and costs from the Group strategic plan and monthly management review process. This ensures that the model includes strategic decisions or changes to the business environment in a timely manner as it uses a business unit structure and revenue drivers for each business unit. These forecasts determine the mean values of the revenue and cost distributions. Further information on the Group business risk EC quantification can be found in the Group's annual Pillar 3 Report under section "Business Risk Economic Capital Model"

Strategic Risk Monitoring of Limits and Concentrations

Strategic Risk is regularly monitored within the "Monitoring of Strategic & Capital Plan" processes performed by the Risk and Capital Profile report on a quarterly basis and the BRS on an annual basis. Detailed analyses on underlying Revenues & Cost deviations from plan are performed on a regular or ad hoc basis as requested by the key stakeholders.

Strategic Risk is identified, managed, mitigated, monitored and communicated jointly by the business (as 1st Line of Defence) and the central Business Risk management function (as 2nd Line of Defence).

Strategic Risk EC is limited via business targets approved by the strategic plan and is therefore aligned with the risk profile and appetite.

Reputational Risk Management

Management of reputational risk at DSI is fully integrated into the Group's reputational risk management framework.

Within Group's risk management process, reputational risk is defined as the risk of possible damage to Deutsche Bank's brand and reputation, and the associated risk to earnings, capital or liquidity, arising from any association, action or inaction which could be perceived by stakeholders to be inappropriate, unethical or inconsistent with Deutsche Bank's values and beliefs.

Deutsche Bank's reputational risk is governed by the Reputational Risk Framework. The Framework was established to provide consistent standards for the identification, assessment and management of reputational risk issues. While every employee has a responsibility to protect Deutsche Bank's reputation, the primary responsibility for the identification, assessment, management, monitoring and, if necessary, referring or reporting, of reputational risk matters lies with Deutsche Bank's Business Divisions. Each employee is under an obligation, within the scope of his or her activities, to be alert to any potential causes of reputational risk and to address them according to the Framework.

If a potential reputational risk is identified, it is required to be referred for further consideration within the Business Division through their Unit Reputational Risk Assessment Process. In the event that a matter is deemed to carry a material reputational risk and/or meets one of the mandatory referral criteria, it must be referred through to one of the four Regional Reputational Risk Committees ("RRRCs") for further review as the 2nd line of defence. The RRRCs are sub-committees of the Group Reputational Risk Committee ("GRRC"), which itself is a sub-committee of the Group Risk Committee ("GRC"), and are responsible for the oversight, governance and coordination of the management of reputational risk in their respective regions of Deutsche Bank on behalf of Deutsche Bank s Management Board. In exceptional circumstances, matters can also be referred by the RRRCs to the GRRC.

The modelling and quantitative measurement of reputational risk internal capital is implicitly covered in the economic capital framework primarily within operational and strategic risk.

Risk and Capital Performance

Regulatory Capital

The following table presents DSI's balance sheet according to Japanese GAAP.

DSI balance sheet according to Japan GAAP

in JPY m	Financial Balance Sheet Dec. 31, 2016
Assets:	
Current assets	4,044,110
Cash	90,293
Deposits	4,763
Trading assets	1,857,787
Pending settlements receivable	136,507
Cash collateral for securities borrowing	1,818,750
Guarantee deposits paid	71,575
Margin accounts on future transactions	8,631
Accrued income	24,249
Deferred tax assets - current	3,158
Income tax receivable	163
Other current assets	28,229
Fixed assets	5,779
Property, plant and equipment	2,745
Intangible fixed assets	26
Investments and other assets	3,007
Total Assets	**4,049,890**
Current liabilities	3,879,223
Trading liabilities	1,112,751
Pending settlements payable	-
Margin transaction accounts	-
Cash collateral for securities lending	2,629,449
Deposits received	24,021
Guarantee deposits received	86,419
Margin accounts on future transactions	-
Short-term borrowings	-
Accrued expenses	23,047
Income tax payable	2,842
Bonus provision - current	672
Other current liabilities	19
Long-term liabilities	23,896
Long-term borrowings	17,000
Allowance for retirement benefits	4,623
Bonus provision - non current	1,294
Other long-term liabilities	978
Reserves	4,088
Statutory reserves	4,088
Total Liabilities	**3,907,207**
Shareholders' equity	142,682
Capital	72,728
Capital surplus	72,895
Retained earnings (losses)	(2,940)
Total net assets	142,682
Total liabilities and net assets	**4,049,890**

Under Japan GAAP regulations, the capital adequacy ratio does not require a regulatory balance sheet and therefore, no reconciliation between consolidated and regulatory balance sheet is needed. Instead, a reconciliation between net assets and net capital for regulatory capital requirements is provided. Capital and Capital surplus in Total net assets consist of common equity only.

Reconciliation from Total net assets of DSI balance sheet to Net Capital in Regulatory Capital requirement

in JPY m	Dec 31, 2016
Total net assets (balance sheet)	142,682
Statutory Reserves	4,088
Long-term borrowings (Subordinated)	17,000
Fixed Assets	-5,779
Liquid assets	-2,387
Net Capital (Regulatory Capital Requirements)	**155,603**

Statutory reserves consist of financial instruments transaction liability reserve. Long term borrowings consist of Subordinated borrowing from DB Tokyo. Fixed Assets contain property and equipment, intangible fixed assets and investments and other assets. Liquid Assets contains advance payment and prepaid expense.

There are no capital buffers applicable to DSI.

Minimum capital requirements according to local Capital Adequacy Rule

As a primary dealer, DSI is required to calculate and monitor Capital Adequacy ("CAD") Ratio and maintain minimum capital amount on a daily basis. In case of a level of 140% or below, it must be escalated immediately to FSA and DSI needs to submit maintenance plan to improve ratio above 140%. In addition, Bank of Japan ("BoJ") asks DSI to maintain a CAD ratio of 200% in relation to our deposit at BOJ though no regulation exists for this request.

Capital Adequacy Ratio Calculation

Capital Adequacy Ratio is provided by the formula which is Net Capital (Total net assets + Statutory reserves + Long term borrowing - Fixed assets - Liquid assets) divided by Risk Value (Total of Counterparty Risk, Market Risk and Fundamental Risk) as follows:

$$\text{Capital Adequacy Ratio} = \frac{\text{Total net assets + Statutory reserves + Long term borrowing - Fixed assets - Liquid assets}}{\text{Credit Risk + Market Risk + Operational Risk}}$$

Regulatory Capital Requirements

in JPY m	Dec 2016	Dec 2015
Risk Value	27,882	31,060
Credit Risk (Counterparty Risk)	4,879	9,048
Market Risk	9,963	7,540
Operational Risk (Fundamental Risk)	13,039	14,471
Capital		
Net Capital	155,603	147,359
Capital Adequacy Ratio	**558.0%**	474.4%

Risk Value moved from Dec 2015 to Dec 2016 as follows:

— Credit Risk decreased by JPY 4,169m mainly due to decrease of stock loan to DB London in Global Prime Finance.
— Market Risk increased by JPY 2,423m mainly due to interest-rate market risk increase in Fixed Income and Currencies.
— Operational Risk decreased by JPY 1,432m due to decrease of operating expenses.

Credit Risk Measurement

Under JFSA requirements, such as among others Japan FIEA and related Cabinet Office Ordinance on Financial Instruments Business, for local regulatory capital, credit risk amount is defined as counterparty risk amount equivalent to possible risks which may occur due to the default in performance of contracts by the counterparties to transactions or any other ground as calculated in accordance with the formula prescribed by JFSA.DSI calculates and measures the regulatory capital requirements for credit risk using the basic indicator approach in line with JFSA requirements as follows:

Credit Risk Value = Net Exposure (Exposure – Collateral) * Risk Weight

"Exposure" is not a notional, but an exposure at default (EAD) before offsetting with "Collateral," and "Net Exposure" means "Exposure" net of "Collateral" received from counterparties. "Net Exposure" should be the basis for credit risk calculations. "Risk weight" is determined by credit ratings (investment grade or not) and industry (basically financial institutions or not).

Credit Risk by Category

The following tables show credit risk by product, country, industry and maturity.

Breakdown of Credit Risk (Counterparty Risk) by Product

			Dec 31, 2016
in JPY m	Exposure*	Net Exposure*	Risk Value
FX related	65,925	36,899	2,125
Interest related	2,996,495	63,209	543
Equity related	1,600,636	134,848	1,364
Others	211,465	211,531	847
Total	4,874,522	446,488	4,879

Breakdown of Credit Risk (Counterparty Risk) by Country

			Dec 31, 2016
in JPY m	Exposure*	Net Exposure*	Risk Value
Australia	164	164	2
China	28	28	0
Germany	1,637	1,637	20
Hong Kong	509	509	6
India	9	9	0
Jersey	18	18	0
Japan	2,202,764	220,657	2,858
Cayman Islands	2,352	2,352	28
Singapore	11,025	11,025	132
United Kingdom	2,491,291	206,158	1,717
United States	162,233	1,395	17
Others	2,492	2,536	98
Total	4,874,522	446,488	4,879

Breakdown of Credit Risk (Counterparty Risk) by Industry

			Dec 31, 2016
in JPY m	Exposure*	Net Exposure*	Risk Value
Central Bank	424	16	0
Government	164	164	0
Exchange	72,031	72,031	0
Financial Institution	4,759,945	361,458	2,675
Non-Financial Institution	41,957	12,820	2,204
Total	4,874,522	446,488	4,879

Breakdown of Credit Risk (Counterparty Risk) by Maturity

					Dec 31, 2016
in JPY m	- 1 year	1year - 5year	6year - 10year	10year -	Total
Total	4,776,628	14,783	37,878	45,233	4,874,522

Market Risk Measurement

Under JFSA requirements, such as among others (Japan FIEA and related Cabinet Office Ordinance on Financial Instruments Business, for local regulatory capital, Market risk amount is defined as market risk amount equivalent to possible risks which may occur due to the fluctuations in the prices of the securities held or other reasons as calculated in accordance with the formula prescribed by JFSA.DSI calculates and measures the regulatory capital requirements for market risk using the standardised approach by risk category in line with JFSA requirements.

Breakdown of Market Risk

	Dec 31, 2016
in JPY m	Risk Value
Equity related	2,508
Interest related	7,401
FX related	41
Others	13
Total Market Risk	**9,963**

Fundamental Risk Measurement

Under JFSA requirements, such as among others Japan FIEA and related Cabinet Office Ordinance on Financial Instruments Business, for local regulatory capital, Operational risk amount is defined as fundamental risk amount equivalent to possible risks which may occur in the course of executing ordinary business, such as errors in business handling, as calculated in accordance with the formula prescribed by JFSA.DSI calculates and measures the regulatory capital requirements for operational risk using the basic indicator approach (one quarter of the annual operating expenses) in line with JFSA requirements.

Economic Capital

Economic capital (EC) requirements (internal capital adequacy under Pillar 2)

Consistent with Group, DSI measures pillar 2 risks under ICAAP using the economic capital approach.

The table below shows the economic capital (EC) usage calculated for credit, market, operational and business (strategic) risk for financial year 2016:

Economic capital usage by risk type

in € m.	Dec 31, 2016
Credit risk	7.3
Market risk	72.1
Operational risk	46
Business (strategic) risk	165.2
Total economic capital usage	**290.6**

EC usage as stated in the above table reflects the risk profile of DSI and its contribution to Group's risk profile. There is minimal credit risk EC due to well collateralized positions. Market risk EC usage reflects the risk of valuation changes due to market price movements throughout the year. Business (strategic) risk EC was highly influenced by the high levels of cost income ratios ("CIR") observed DSI businesses mainly Core Rates, Equity Derivatives, and Credit Trading. Operational risk EC usage as allocated by Group's AMA model reflected the business profile and activities of DSI.

Internal Capital Adequacy

DSI measures internal capital adequacy (ICA) as the ratio of total capital supply divided by total economic capital demand. Consistent with the Group, ICA shows the capitalization of DSI under Pillar 2 (ICAAP). A ratio of more than 100 % signifies that the total capital supply is sufficient to cover the capital demand as shown in table below.

Total capital supply and demand

in € m. (unless stated otherwise)	Dec 31, 2016
Book Equity	669.1
Paid in Capital	588.5
Retained Earnings	80.6
Other Reserves	0
Valuation Adjustments	0
Other Adjustments (deductions)	0
Additional Tier 1 Capital	589.9
Tier 2 capital	20.6
Total Capital supply	**1,279.5**
Total Capital demand[1]	**290.6**
Internal capital adequacy ratio	**440%**

[1] Refer to table "Economic capital usage by risk type" above

This ratio was 440 % as of December 31, 2016, this signifies that DSI is well capitalised. The capital supply is more than enough to cover EC capital demand arising from our business activities.

Asset Quality

Impairments

Applying the asset quality review processes outlined above, there are currently no impairments recorded in DSI.

Liquidity Risk Exposure

Although the JFSA implemented in 2016 a new reporting requirement on LCR, it is at this stage a simple monitoring tool with no set targets or limits for which the exact calculation method is still being finalized.

Leverage Ratio Exposure

Leverage ratio is a non-risk based leverage ratio that is intended to act as a supplementary measure to the risk based capital requirements. Its objectives are to constrain the build-up of leverage in the banking sector, helping avoid destabilizing deleveraging processes which can damage the broader financial system and the economy, and to reinforce the risk based requirements with a simple, non-risk based "backstop" measure.

There are currently no local requirements on leverage ratio in Japan.

Remuneration Policy

Deutsche Bank Group generally implements its compensation policies on a group-wide basis, so that the compensation policies and decisions as described and published in the Group's Compensation Report (https://annualreport.deutsche-bank.com/2016/ar/servicepages/downloads/files/dbfy2016_remuneration_report.pdf) also apply to the employees of the DSI. DSI had a total of 522 employees as of December 31, 2016, including both direct contract of 6 and 1 Statutory Auditor. Excluding both is 515 at the end of Dec 2016. Total compensation and benefit for DSI was 123.9 million Euros and bonus (both cash and deferred amortization) was 19.2 million Euros.

Compensation disclosure pursuant to Sec. 16 InstVV and Art. 450 CRR

Pursuant to Sec.16InstVV and Art.450 CRR compensation disclosure,the Group identified individuals who have a material impact on the risk profile of the Group (InstVV MRTs). Of these, 37 InstVV MRTs were employed by DSI. Thecollective remuneration elements for these InstVV MRTs are detailed in the tables.

DSI aggregate remuneration for InstVV Material Risk Takers ("MRT")

	2016								
		Business units							
in € m. (unless stated otherwise)[1]	Senior Management[2]	GM	CIB	PW&CC	Deutsche AM	NCOU	Independent Control Functions[3]	Corporate Functions[4]	Total
Number of MRTs (headcount)	1	29	8	-	-	-	-	2	**40**
Number of MRTs (FTE)	1	29	8	-	-	-	-	2	**40**
Total Pay	1.5	14	3.1	0.0	0.0	0.0	0.0	0.8	**19.4**
Total Fixed Pay	1.3	12.7	2.9	0.0	0.0	0.0	0.0	0.8	**17.6**
Total Variable Pay for period	0.1	1.3	0.2	0.0	0.0	0.0	0.0	0.1	**1.8**
thereof:									
in cash	0.1	1.0		0.0	0.0	0.0	0.0	0.1	**1.3**
in shares	0.1	0.3		0.0	0.0	0.0	0.0	0.0	**0.5**
in other types of instruments	0.1	0.0		0.0	0.0	0.0	0.0	0.0	**0.0**
Total Variable Pay for period, deferred	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	**0.4**
thereof:									
in cash	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**
in shares	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**
in other types of instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Article 450 (1) h(iii) of the CRR in conjunction with article 450 (1) h(iv) of the CRR on deferred variable remuneration from previous years and on explicit risk adjustments									
Total amount of variable pay still outstanding at the beginning of the year that was deferred in previous years	5.4	14.9	2.0	0.0	0.0	0.0	0.0	0.8	**23.0**
thereof:									
vested	1.1	8.1	1.0	0.0	0.0	0.0	0.0	0.4	**10.6**
unvested	4.3	6.8	1.0	0.0	0.0	0.0	0.0	0.4	**12.5**
Deferred Variable Pay awarded, paid out or reduced during period									
awarded during period	1.3	9.7	2.1	0.0	0.0	0.0	0.0	0.4	**13.4**
paid out during period	1.1	5.5	0.8	0.0	0.0	0.0	0.0	0.3	**7.7**
reduced through explicit risk adjustments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0.**
Article 450 (1) h(v) of the CRR on hiring bonuses									
Number of beneficiaries of guaranteed variable remuneration (hiring bonuses)	-	-	-	-	-	-	-	-	-
Total amount of guaranteed variable pay (hiring bonuses)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0.**
Article 450 (1) h(v) and (vi) of the CRR on severance payments									
Total amount of severance payments granted	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0.**
Number of beneficiaries of severance payments granted by headcount/FTE	-	-	-	-	-	-	-	-	-
Highest severance payment granted to an individual	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0.**

[1] Figures may include rounding differences.
[2] Refers to members of the Senior Leadership Cadre.
[3] In accordance with regulatory guidance, "Independent Control Functions" for the purposes of this table include the areas of the Chief Risk Officer, the Chief Regulatory Officer as well as Group Audit. Internally, the Bank has identified more Infrastructure Functions as "Independent Control Functions" to which the Bank also applies the fixed to variable remuneration ratio of 1:1.
[4] Corporate Functions comprise any Infrastructure Function that is not captured as Independent Control Function for the purposes of this table.

DSI remuneration of high earners

in €	2016 Number of employees
Total Pay	
1,000,000 to 1,499,999	3
1,500,000 to 1,999,999	0
2,000,000 to 2,499,999	0
2,500,000 to 2,999,999	0
3,000,000 to 3,499,999	0
3,500,000 to 3,999,999	0
4.000,000 to 4,499,999	0
4,500,000 to 4,999,999	0
5,000,000 to 5,999,999	0
6,000,000 to 6,999,999	0

In total, 3 DSI employees received a Total Pay of € 1 million or more for 2016.