Telia | FINANCE

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There are two segments within credit, Enterprise e.g. companies, and Consumer e.g. private customers.
For Consumer, the credit risk is measured as net credit losses in relation to the portfolio rolling 12 months and for Enterprise, net credit losses is measured on an average for the current calender year (counting up). The credit losses are measured separately for respective segment. Net credit loss is the defaulted receivables amount after, if applicable, debt purchase from external collection agency.

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For monitoring and control of large exposures, TF has defined internal limits, which place further restrictions on the size of such exposures beyond those referred to in the Capital Requirements Regulation (EU) No. 575/2013. In addition, stress testing is an important credit risk management tool for TF. Stress tests and stress scenarios are not only performed under the ICAAP framework but are also carried out on a regular basis in accordance with TF's framework for stress testing. Stress tests include macroeconomic scenarios, rating migration analysis and reverse scenarios. The effects of these factors and scenarios are analyzed on TF's large exposures, expected loss and capital requirements. Stress tests form an integral part of the risk reporting to the Board and the Risk and Compliance Committee.

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The Credit Department is responsible for presenting the credit risk levels to internal and external stakeholders, including the Credit committee and the Board of Telia Finance. If the credit risk level exceeds risk tolerance set by the board, this is reported according to the risk appetite statement.

Credit risk is analyzed and reported to management and board on a monthly basis, divided in consumer and enterprise business.

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Concentration risk is the risk of increased vulnerability arising from Telia Finance's commitment that is concentrated on a limited number of customers, geographical area or a particular industry.

To estimate Pillar 2 requirement for potential losses caused by a high concentration risk Telia Finance uses FSA's methodology Herfindahl index to estimate industry/sector concentration, geographical concentration and name concentration among the 30 largest exposures. Telia Finance evaluates the concentration risk on a quarterly basis.

Sweden is the company's largest market, with approximately 60% of the total exposure as of 31 December 2018. Skåne läns landsting is the largest exposure followed by Streamteam Nordic Oy. As of 31 December 2018 the pillar 2 requirement for concentration in sector is estimated to 11 737 KSEK. The requirement related to geographical concentrations is estimated to 6 571 KSEK and requirement related to the name concentration within the 30 largest exposures is estimated to 1 786 KSEK, resulting in a total Pillar 2 own funds requirement for concentration risks of 20 094 KSEK.

5 Market risk

5.1 Risk management

TF's Board of Directors decides on the market risk appetite, risk strategy and risk policy. TF's Chief Financial Officer decides on the methodology for measurement of market risks and suggests changes to the limit structure and limits levels in conjunction with limit and risk appetite reviews. All instructions are re-established annually. Market risk exposures are reported by the financial control function to the CEO on a monthly basis and to the Risk and Compliance Committee and the Board at their scheduled meetings. If a limit breach occurs it is timely escalated by the CRO to the CEO and the Board. TF conducts no active trading and the TF's business model entails that all transactions are normally held to maturity.

5.2 Risk mitigation methods

Market risk is managed based on guiding principles and overall rules as set out in the "Finance Policy". This policy is supplemented by Guidelines issued by Finance and relevant first line of defence units. TF minimize market risks by hedging currencies and matching debts and assets, with no speculation in neither currencies or interest rates.

The aim of managing currency risks is to minimize the variability in profits at reasonable costs. Currency risk must therefore not be eliminated but instead minimized while taking into consideration the cost of the management. Foreign currency exposure is minimized by matching the assets and liabilities in currency and duration.

5.3 Measurement

Telia Finance measures the currency risk monthly to get indicators early on if there is an increased risk. The currency risk is measured in the short and long term, whereby the company measures its structural currency risk by following the appropriate key ratios in the balance sheet to highlight the financial structure and specific features of the company's currency risk. For this purpose, the company uses cash flow and cash flow analyses as key figures and measurement methods.

The Interest rate risk is measured according with SFSA's method of calculating capital requirement in pillar II for Interest Rate Risk in the Banking Book (IRRBB). SFSA's method calculates the capital requirement as a function of the mismatch of repricing dates and maturities between liabilities and assets. This is achieved by the method taking account of the sensitivity in the firm's economic value to changes in the yield curve and differences between the firms' financing cost and market rate of interest. The repricing date for the firms' equity and NMDs is set at zero. The economic value is calculated as the present value of the future net interest income for interest-bearing positions in a firm's banking book and the calculation of the yield curve stress scenario is based on three different kinds yield curve stress scenario (parallel shifts, slope changes and shift of the firms credit spread)

Each quarter, an Interest rate risk calculation is reported to Swedish Financial Supervisory Authority on the impact of a sudden change in the general interest rate situation. The calculation is based on an assumption that an interest rate change occurs in parallel with two percentage points. If such an interest rate shock results in the company's economic value falling by more than twenty percent in relation to the capital base, Telia Finance has to report to Swedish Financial Supervisory Authority on measures to reduce risk. In October 2017 the EBA presented a consultation paper on its guidelines of the interest rate risk in the banking book (IRRBB),

5.4 Stress testing

For Currency risk stress testing is performed on a monthly basis where the last 10 years are analyzed by looking at the currency changes with 0.5% brackets in absolute values for EUR, NOK, USD and DKK. The highest month-month change is evaluated and stressed.

The interest rate risk has a new approach since previous years where the new model presented by the Swedish FSA for IRRBB pillar II requirements are used. Doing the six different scenario analysis gives the capital requirement for interest rate risk.

5.5 Capital requirements

The capital requirement for currency risk in pillar 1 is calculated using the Standardized approach, as 8% of risk-weighted exposures of the total net position in foreign currency. The currency risk in pillar 1 is per 2018-12-31 901KSEK. Monitoring
Market risks are measured, analyzed and reported to management on a monthly basis. Limit breaches are reported, escalated and managed according to documented internal procedures. A more thorough analysis of markets, market risk trends and stress tests of the portfolio is performed and reported to management on a quarterly basis and to the Board quarterly.

The interest rate risk per 2018-12-31 was 11 225 KSEK i.e. 0,36% of the RWA.

6 Operational Risk

6.1 Risk management

Operational risk exists in potentially all TF's activities. The risk management responsibilities follows the three lines of defense where managers are responsible for the identification and management of operational risks within their own function. The responsibility for monitoring and reporting operational risk, lies with the independent Risk function. The Risk function is also responsible for monitoring the suitability and effectiveness of the management of operational risk. In the same way, the compliance function has the responsibility for monitoring and reporting compliance risk. Exposure to operational risk is reported by the Risk function to the Risk and Compliance Committee and the Board of Directors.

6.2 Risk identification

The main activities used to manage the operational risk are described below.

6.3 Risk workshops

TF conducts yearly risk workshops with all functions. The workshops are based on self-assessment with the Risk Function making an independent reasonability control. Risks are identified both through top-down executive management involvement, Risk workshop with the Executive management team, and bottom-up through the Risk workshops with the individual functions. Based on identified operational risks, action plans are developed for the management or reduction of identified risks. Any identified risk that are not within the Risk appetite of the company are to be closed. The independent Risk function carries out an aggregated analysis and monitoring of all identified risks and action plans. The material risks are then analyzed and monitored individually. The annual risk analyses are conducted in coordination with business planning and the internally assessed economic capital as part of the strategic planning

6.4 Incident management

TF views incident reports as an important part of its continuous improvement measures and these reports comprise a key source of information. The company separate IT incidents from business incidents. When operational risk events, incidents, occur, the immediate focus lies on resolving the direct event in order to minimize damage, independently of type of incident. After having resolved the incident, an analysis of the root cause is performed to understand why it occurred, and remedial actions are determined and followed up in order to prevent repetition of the event. All IT-incidents that can be connected to operational risks are also reported as a business incident to enable calculation of economic capital. Business incidents are reported to the independent risk function and other interested parties. The company encourages staff to report incidents and applies no materiality criteria for reporting incidents.

6.5 New Product Approval Process (NPAP)

In order to maintain the risk level within the company and to not expose the company to unwanted risk exposure when making significant changes to or developing new products, processes and systems, the company has established a new product approval process and a New Product Approval Committee (NPAC). When significant changes are made, the affected functions analyze what consequences might arise to their processes, system support and the regulations that apply to them. When identifying consequences that need to be addressed, the adjustments must be made before the new product, process or system can be approved.

6.6 Business Continuity Management and information security

At TF, security involves protecting customers, individuals, information and physical assets. Information must be kept confidential and be reliable and accurate, and it must be made available to the appropriate people as and when needed. TF’s security efforts include technical, organisational and administrative measures, which are based on the international information security standard ISO/IEC 27000. TF works in a pre-emptive manner to prevent security incidents that may affect the company’s ability to operate. TF has an established contingency organization that is responsible for crisis and catastrophe management, and communication in case of serious incidents, crises or disasters.

The identification of Risks related to Information security is integrated in the Risk workshops conducted with all functions. In addition, the Chief Security Officer conducts an independent overall risk assessment. TF manages information security risks by identifying risks in the logical, technical and physical domains and by monitoring that control processes for information security are effective and in line with the defined risk appetite and relevant Operational. TF has adopted a standardized threat profile that is extended on demand by more detailed information security threat assessments. Combined, these provide a baseline for the annual information security risk assessment that is supplemented with risk treatment plans. To ensure continuous availability of business-critical processes, TF annually conducts a review of its use of technology, premises and staff in the operational processes. The requirements for this are part of the information security framework. TF runs two geographically separated IT centers between which critical servers are duplicated and data is mirrored. In addition, TF has access to separate backup office facilities outside the city center with enough capacity for staff to run all critical business processes, including IT operations and maintenance. The effectiveness of data centers and recovery procedures is assured through disaster recovery exercises at least once a year.

6.7 Compliance risk and Anti Money Laundering

The Compliance function is responsible for identifying the risk that business is not conducted in compliance with laws and regulations The Compliance function further assists the organization in identifying and assessing the risk of legal or regulatory sanctions, material financial loss, or loss to reputation that TF may suffer as a result of its failure to comply with the applicable regulations. This assessment also covers new legislation, internal regulations and the risk of conflicts of interest. Money laundering risks are identified in accordance with the Swedish Act on Measures against Money Laundering and Terrorist Financing. Procedures for monitoring money laundering risks include the collection and review of customer information and the monitoring of transactions in accordance with a risk-based approach. All employees receive regular training and information regarding changes in regulations and new trends and patterns, as well as regarding methods that may be used for money laundering and terrorist financing. TF has process for providing information regarding suspicion of money laundering to the Swedish National Police Board.

6.8 Measurement

TF measures the level of operational risk on an ongoing basis. The company's conclusion regarding the risk level is based on an assessment of primarily five components:

- Risks identified in risk workshops and in the ongoing business
- Monitoring incidents and follows up on provisions
- The amount of losses from reported incidents
- Key risk indicators
- Whether efficient internal controls relating to financial reporting, in accordance with the Group's standards exist

6.9 Monitoring

The Risk function monitors the compliance with the Risk appetite on a continuous basis. Compliance with the Risk appetite is followed up both with a forward looking evaluation, i.e. one year expected loss from identified risks, as well as a backward looking approach, i.e. actual realized losses.

Key risk indicators - TF follows a selection of indicators that give an early warning of increased levels of operational risk including IT-risks. If an increased level is indicated the independent risk function analyses the reason behind the increase and follows up on the mitigating actions, if needed.

6.10 Capital requirements

Over the years, the overall level of operational risk has decreased as a result of long term work focusing on continuous improvement, well documented procedures and higher awareness of the importance of managing operational risk.

6.10.1 Operational incidents

Operational incidents are valued by their impact level pending on a four graded criticality scale level (ranging from minor < 10 tsek to significant > 1 msek). No significant incidents where reported as of last year.

Table of minimum capital requirement and internally assessed capital

KSEK	2018 Pillar I	2018 internal assessed	2017 Pillar I	2017 Internal assessed
Operational risk	50 884	49 121	42 912	34 383

6.11 Internal control

The Risk function monitors and reports both the overall appropriateness of implemented Internal Controls as well as the results from the testing activities to the Risk and Compliance Committee and to the Board.

7 Pension risk

Pension risk arises from the obligation under TF's defined-benefit pension plans to provide agreed compensation to existing and former employees of the company. Even though TF makes ongoing payments to secure this obligation, a risk exists in the form of a negative outcome in terms of the return on the capital provision. The present value of the pension obligation could also increase depending on actuarial assumptions in terms of mortality and as a result of a lower discount rate. TF quantifies pension risks in accordance with the Swedish FSA's methods for assessing individual types of risk within Pillar 2.

The pension risk per 2018-21-31 amounts to 30 340 KSEK.

8 Business risk

8.1 Risk Management

Telia Finance's management team and the Board continuously assess the company's efficiency. Business risk is identified through risk analysis of the drivers and is monitored and prevented as deemed necessary. Costs to reduce risk exposures must be in proportion to the effect of such measures.

Residual value

By residual value Telia Finance mean agreements where the customer have not paid the whole credit amount at end-of-lease and the residual value at end-of-lease is guaranteed by Telia Finance. The articulation and management of Residual Value risk is specified in the "Instruction on Residual Value" and categorized as a business risk.

Due to the risk in residual values the ambition is to have at least 45% margin on the residual value stock at end-of-lease.
Products limitations:

- Mobile phones and tablets, residual values standard on 24 months, maximum 36 months
- PC's residual values standard on 36 months, maximum 48 months

The level of residual vale must be followed up quarterly and every six month an analysis is made of all residual values in the portfolio. The analysis provide an overview of the residual values in the portfolio per country and product. A forecast on expected future value on second hand market at the End-of-Lease (EoL) date compared to the set residual values. EoL mean when agreed leasing time has ended, i.e. at the end of the agreement.

9 Buffer requirements

Capital conservation buffer constitutes 2,5% of the company's total risk weighted exposures and aiming to cover the company's possible losses during difficult times.
The contracyclical capital buffer calculates with a contracyclical buffer value of 0-2,5%. Reciprocity vis-à-vis other states buffer value is applied to the extent that the states have reported their buffer values to European Systemic Risk Board (ESRB), while others apply a buffer value of 0%. For Telia Finance this gives a total contracyclical buffer value of 1,62% per 2018-12-31.

The company is exempted from the requirement to hold a systemic risk buffer.
Common equity tier 1 capital is available to be used as a buffer after deduction of capital used to meet the capital requirement, which present 18,58% of risk weighted exposure amount per 2018-12-31.

10 Liquidity risk

10.1 Risk strategy and management

TF's Board of Directors has the overall responsibility for liquidity risk management and establishes policies for liquidity risk management. Instructions established by the CEO regulate TF's management of liquidity risks. Operational responsibility for liquidity risk management lies within TF's Finance function. Short-term liquidity is monitored and managed on a monthly basis by business controller, while long-term liquidity planning is monitored on a quarterly basis and reported to Risk Control, CEO, and the Board of Directors. Responsibility for ensuring compliance with short-term and long-term liquidity risk limits lies within Finance. The risk control function is responsible for following up exposures versus limits and for escalating to executive management, the Board's Risk and Compliance Committee and the Board as appropriate.

10.2 Risk mitigation methods

Match funding of the company's balance sheet is a fundamental and integral part of TF's business operation.

10.3 Financial strategy and Liquidity strategy

The company measures the liquidity risk continuously to minimize the liquidity risk. As far as possible, the company borrows funds in accordance with agreed in the customer agreements about different maturities, currencies and interest levels. The company measures its liquidity risk in the short and long terms. The factors, which influence the company's liquidity, are the level of its equity, the possibility of borrowing funds from the Group and the "float". The "float" is the billing services that the company carries out for various Group entities, which affects the company's cash flow. Often Telia Finance invoices the end customer on a quarterly basis but the cash transfer to the other group entities are monthly. This arrangement reduces Telia Finance's need for borrowing by a corresponding amount. If this agreement between Telia Finance and Telia ceases, Telia Finance's borrowing need and interest expenses will increase. This increase at present falls within the borrowing limit agreed between Telia Finance and Telia's treasury function.
During 2018 Telia Finance has changed the liquidity reserve from Swedish government bonds to "Kommuninvest" bonds to get a higher yield. The holdings presented to current

market value with a risk weight of 0%. As per 2018-12-31, the liquidity reserve amounted to 513 MSEK.
The company also has a binding liquidity reserve, unutilized borrowing limit, cash resources in the company's cash pool and other cash resources in form of deposits at the company's funder, Telia Company AB.

10.4 Liquidity reserve

The CFO has overall responsibility for managing, monitoring and reporting the liquidity risk. Management of this comes under the Controlling unit. In operating activities, the Financial Controller makes liquidity forecasts to safeguard the short-term liquidity flows. A long-term forecast is also made monthly in which the total assets and liabilities of the company are reviewed. If the company's borrowing limits are utilized to 80%, the CFO is informed.

The Business Controller makes a liquidity forecast every month to report the LCR to the Swedish Financial Supervisory Authority. This is a 30-day stressed forecast of future inflows and outflows. The requirements from the Swedish Financial Supervisory Authority is that 100% of the net outflow should be covered by a liquidity reserve. The internal risk limit is decided to 110% for this indicator. Long-term forecasts are also made quarterly to ensure that the company has enough liquidity reserve. This is also reported quarterly to the Board.

The company continuously analyses its inflows and outflows to synchronize and optimize cash flow. Current liquidity reserve consists of liquid assets in form "Kommuninvest" bonds and the holdings are taken up to current market value with a risk weight of 0%. The LCR per 2018-12-31 was 164%.

10.5 Monitoring

Liquidity risk is monitored through regular analysis and reporting to the Board, CEO and Risk Control function. Board reports are produced on a quarterly basis and include follow-up of Liquidity coverage ratio (LCR), Net stable fund Ratio (NSFR), internal measurements, portfolio composition and liquidity stress tests.

10.6 Contingency plan

If a situation would occur where Telia Company would not be able to provide more funding, there is also a possibility to go to other financiers. This would increase the cost but since the funding cost is approximately 5-7% of Telia Finance yearly result, an increased cost would be manageable without any major impact on the financial result.

11 Capital assessment

Aggregated capital assessment (KSEK)		2018	2017
Pillar 1	Credit risk	198,667	222,272
	Operational risk	50,884	42,912
	Currency risk	901	996
	Total pillar 1	**250,452**	**266,180**

Pillar 2	Interest risk	11,225	2,155
	Pension risk	30,340	28,175
	Concentration risk	20,094	27,281
	Total pillar 2	**69,779**	**57,611**
Capital buffers	Capital conservation buffer	78,223	83,181
	Contracyclical buffer	50,585	54,753
	Capital planning buffer		-
	Total Capital buffers	**128,808**	**137,934**
	Total capital assesment	**440,919**	**461,725**
	Risk weighted exposures	3,128,924	3,327,241
	Capital base	581,352	596,482
	Total capital coverage ratio	**18.6%**	**17.9%**