

Solvency and Financial Condition Report (SFCR)

Credit Suisse Life & Pensions AG, Vaduz

15-May-2017

Abbreviations

AC	Audit Committee
AMSB	Administration, Management and Supervisory Board
BoDCSLP	Board of Directors of CSLP
BoP	Beginning of Period
CAF	Central Actuary Function
CRO	Chief Risk Office(r)
CSG	Credit Suisse Group AG
CSLP	Credit Suisse Life & Pensions AG, Vaduz
CSLPiB	Credit Suisse Life & Pensions AG, Vaduz, Italy Branch
EC	Eligible Capital
EoP	End of Period
FLDS	First Line of Defense Support (formerly BRM)
GAAP	Generally Accepted Accounting Rules
IR	Interest Rate
LAA	Local Appointed Actuary
LGD	Loss Given Default
MCR	Minimum Capital Requirement
OF	Own Funds
ORSA	Own Risk and Solvency Assessment
PVFP	Present Value Future Profits
q-o-q	quarter-on-quarter
RAF	Risk Appetite Framework
RC	Risk Committee
SCR	Solvency Capital Requirement
WTW	WillisTowersWatson AG
y-o-y	year-on-year

Conventions

Dec-16	as per month end December 2016
Dec16	during the month December 2016
4Q16	as per quarter end Q4 2016 (here: year-end)
m	millions
bn	billions

1 Business and Performance

1.1 Basic Information

Credit Suisse Life and Pensions AG, Vaduz, abbreviated here and in the following as “CSLP”, is an unquoted, limited company, located in Liechtenstein (Fürstentum Liechtenstein, FL) with an Italian Branch, located in Milano. Credit Suisse AG, Switzerland, (CS) is CSLP’s sole shareholder with a nominal share capital of CHF 15.0m. Credit Suisse AG itself is a 100% subsidiary of Credit Suisse Group AG (CSG). CSLP functionally is embedded in the International Wealth Management Division of CSG.

Its local supervisory authority is the ‘Finanzmarktaufsicht Liechtenstein’, [FMA](#),

Finanzmarktaufsicht Liechtenstein
Landstrasse 109
Postfach 279
FL-9490 Vaduz

The external auditor of the firm is

KPMG (Liechtenstein) AG
Audit
Landstrasse 99
FL-9494 Schaan

1.2 Material Lines of Business (LoB)

CSLP offers unit-linked life insurance products primarily to affluent private clients or to those private clients’ asset managers. CSLP serves clients in two markets – Italy and Germany. Life Portfolio UK was sold in the meantime upon FMA’s approval. Two factors majorly influence CSLP’s current business and business development: while the Bank’s internally launched regularization projects are completed (from a project perspective), the business itself depends on the Bank (as distributor) and potential tax changes in the respective jurisdictions. With 4Q16, all Life TIP policies matured.

1.3 Events with a material Impact on the Firm

No 'event' with material impact was recorded during the reporting period.

1.4 Underwriting Performance

Year	Premiums booked (in CHFm)			# of Policies ¹	
	New Bus. ²	Surr. ³	VTR ⁴	New Bus.	Total
2014	528	-517	6'023	299	4'884
2015	608	-458	5'611	516	4'176
2016	373	-524	5'371	382	3'302

Table 1: New Business, total and partial Surrenders, CSLP 2014-2016.

Over recent years, CSLP's Policyholder (PH) investment base reduced primarily due to the maturing Life TEP (Traded Endowment Policies) starting in 2015, completed as per end 2016.

1.5 Investment Performance

Given CSLP's business model and its stringent investment management, returns and investment performance on its own funds is basically non-existent due to negative interest on cash positions. See below some figures on Shareholder Equity (SH EQ) but also acquisition and administration expenses.

Year	(A) SH EQ ⁵	(B) Acquisition Expenses ⁵	(C) Administr. Expenses ⁵
2014	75.8	-3.0	-2.6
2015	79.2	-2.7	-2.7
2016	84.8	-2.6	-2.2

Table 2: Expenses per Year in CHFm.

Some comments on the above figures:

- **(A) Shareholder Equity (SH EQ):** Changes primarily caused by retained earnings.
- **(B) and (C) Expenses:** Expenses are rather constant over time and consist of variable (triggered by recurring expenses depending on number of policies administered) and fixed elements (primarily resources).

¹ Source: „Geschäftsbericht“, „Jahresbericht“

² including additional payments (source as above)

³ including partial and total surrenders but also maturing policies (e.g. Life TiP) and death cases (source: as above)

⁴ ‚Versicherungstechnische Rückstellungen‘, Actuary Report

⁵ as entering Solvency-II calculations

According to CSLP's most recent Business Plan (as per 3Q16), it is not expected that CSLP's asset base will change materially.

As CSLP is exposed primarily to the currency pair CHF/EUR (costs in CHF, revenues pre-dominantly in EUR), F/X changes (market fluctuation as well as potential trigger events (such as the SNB decision mid-January 2015) are closely monitored.

1.6 Other material Information on Business and Performance

According to Art. 1(2), Decree 209/2002, Italian resident insurance companies (and Italian permanent establishments of non-resident insurance companies) are subject to tax on mathematical reserves of certain life insurance products. The current pre-tax rate equals 45bps and

- determines the annual pre-payment due (creating a Deferred Tax Asset without P&L impact);
- potentially increases liquidity/funding needs, hence, interest cost;
- potentially increase in Deferred Tax Assets (DTA) and hence Tier-3 capital constraints under S-II.

An adaption in pricing has been analyzed at the time the increase in tax rate was announced by also looking at main competitors; however, the benefit of a potential adaption was deemed limited given the risk of losing assets. Regarding capitalization under Solvency II, it can be said that the annual increase in capital constraints (ignoring favorable or adverse F/X movements) currently is more than offset as benefiting from the two recovery mechanisms and an additional cap allowed by the Italian tax authorities and as audited and confirmed on an annual basis.

2 System of Governance

2.1 General Information on the System of Governance

CSLP’s Management very early (2010) decided to mandate external experts with a gap analysis to ensure adherence to Solvency II as early as possible. Based on this clear-sighted view, CSLP was able to move from project mode into functional mode in 2013 and established quarterly Risk Committees from 2014 onwards. Due to the deferral of Solvency II towards 2016, CSLP got an additional two years for ‘warm-up’ and familiarization of its entire organization to grow into Solvency II in terms of processes, governance and experience.

Apart from what is elaborated on in more detail below, we would like to refer to a document CSLP composed on its System of Governance (SoG), cf. [17] . It is primarily based on [EIOPA-CP-13/08](#) and comments on each of the corresponding guidelines by referring to CSLP’s view on how the corresponding topic is tackled. Figure 1 is taken from the internal document and gives a good overview on the main elements of CSLP’s System of Governance.

	Model	Business Plan / Capital Mgmt	Risk Mgmt	General Governance	Other
Policies & Procedures	<ul style="list-style-type: none"> Model Doc Code Doc 'DEV' + 'PROD' Versioning Release Notes (Regression Testing) 	<ul style="list-style-type: none"> Business Planning process doc (timelines, format, responsibilities) Investment and Capital Mgmt Policy 	<ul style="list-style-type: none"> Risk Mgmt Manual Risk Appetite Framework Risk Id./Review Process Actuarial Responsibilities Assumptions Setting Adequacy S II std. formula 	<ul style="list-style-type: none"> Outsourcing, Fit & Proper Mandates Key Functions OpRisk & BC Mgmt BoD Charter 	<ul style="list-style-type: none"> GP-00060
Inputs	<ul style="list-style-type: none"> Model Changes (Parameters)¹ Code Version 	<ul style="list-style-type: none"> 3y sales forecasts (volume, # of pol.) 	<ul style="list-style-type: none"> Limit thresholds Capital thresholds Market data Stress parameters 	<ul style="list-style-type: none"> n/a Reporting schedule n/a ... 	<ul style="list-style-type: none"> Clear roles and responsibilities
Solvency II Calculation Engine					
Outputs Reports	<ul style="list-style-type: none"> 2QYY Dashboard³ Assumptions & Mgmt rules Change Log 	<ul style="list-style-type: none"> 3QYY Dashboard³ Projection parameters Potential Capital relevant transactions 	<ul style="list-style-type: none"> 4QYY ORSA³ (Data Quality Statement, Validity Std. Formula) 1QYY Dashboard³ 	<ul style="list-style-type: none"> Regular criticality / fitness / properness assessment Annual Audit plan/report Annual Data Quality Report 	<ul style="list-style-type: none"> Fully traceable sign-offs
Review⁴	<ul style="list-style-type: none"> AF, AA, CRO, RC² 	<ul style="list-style-type: none"> CFO, CRO, RC 	<ul style="list-style-type: none"> RC 	<ul style="list-style-type: none"> Outsourcing Manager CRO Chairman BoD AF 	

¹: as relevant and pre-scribed by EIOPA in the Standard model approach
²: the ExB of CSLP is, amongst others, member of CSLP’s RC

³: including QRTs
⁴: approval anyway sits with the BoD

Figure 1: CSLP’s SoG from a Process Perspective.

2.2 Administrative, Management and Supervisory Body (AMSB)

The main bodies of CSLP can be listed as follows:

- Board of Directors (BoD),
- Executive Management (EM),
- Key functions (see next sections),
- Risk Committee (see next sections).

Core governance elements are defined in CSLP's BoD Charter, cf. [9] (which is derived from CSG's BoD Charter) where organizational requirements as well as roles, responsibilities and crucial processes as e.g. the annual assessment of 'fitness' and 'properness' are defined.

2.2.1 Risk Committee

CSLP's Risk Committee (RC) is enabled by the BoD to regularly assess and monitor CSLP's capitalization under Solvency II and its adherence of regulatory requirements. Responsibilities of the RC are also defined in the ORSA report.

2.2.2 Key Functions

Key functions of CSLP under Solvency II comprise the Actuarial Function, Compliance, Internal Audit and Risk Management. They comprise the responsibilities as follows.

Central Actuarial Function (CAF): A detailed definition and description of tasks and services (to be) carried out by the CAF is part of the respective contractual agreement; a summarizing mandate is composed for the CAF, cf. [10].

Compliance.: A summarizing (and hence non-exhaustive) note on the main responsibilities of the Compliance function is contained in [11].

Internal Audit: This function is assumed by CSG Internal [Audit](#), following strict principles, processes and assessments cf. [2], in order to provide a systematic objective and independent assessment of whether

- risks are appropriately identified and managed;
- the (Group's) internal control systems are effective;
- governance processes ensure compliance with policies, standards, procedures and applicable laws and regulations;
- management performs efficient monitoring and oversight of processes and activities; and
- assets are adequately safeguarded.

Risk Management: The main responsibility of risk management is to identify, assess, monitor and suggest mitigation of risks CSLP is exposed or might become exposed to. A dedicated Risk Management Manual (RMM), cf. [21] covers such topics but is complemented by the following elements (as described in CSLP's RAF, cf. [20]):

- definition of Risk Appetite,
- definition of Stress Scenarios and Stress Testing,
- definition of Risk Limits,
- definition, coordination and composition of the Own Risk and Solvency Assessment (ORSA),
- contribution of risk management to a strong system of governance,
- definition of responsibilities regarding CSLP's Risk Committee.

2.3 Changes in the System of Governance

This section is to be updated once a second RSR is filed to FMA beyond the preparatory phase.

2.4 Remuneration Policy and Practices

Principles and statements as set out [CSG's Compensation Policy](#) fully apply to CSLP stipulating that

- supports a performance culture that is based on merit, and differentiates and rewards excellent performance, both in the short and long term, and recognizes the Group's values;
- enables the Group to attract and retain employees, and motivate them to achieve results with integrity and fairness;
- balances the mix of Fixed Compensation and Variable Compensation to appropriately reflect the value and responsibility of the role performed day to day, and to influence appropriate behaviors and actions;
- is consistent with, and promotes, effective risk management practices
- and the Group's compliance and control culture;
- fosters teamwork and collaboration across the Group;
- takes into account the long-term performance of the Group, in order to create sustainable value for the Group's shareholders; and
- is approved by CSG's Board of Directors (BoD) and regularly monitored in terms of implementation by CSG's independent Compensation Committee of the BoD.

Regarding performance criteria, further referring to [CSG's Compensation Policy](#), CSLP adopts a performance culture with a strong emphasis on disciplined risk management, ethics and compliance-centered behavior. Allocation decisions are based on the performance of CSG, the Division, and the individual. To support this, the Group has a comprehensive performance management system based on two performance ratings: Contribution and Competency. Contribution ratings are typically based on objective criteria, such as achieving budget targets, increasing market share, and successful completion of a project.

Competency standards covering ethics, risk, and control form an integral part of the performance management system.

2.4.1 Material Transactions of Shareholder Capital

No transaction of shareholder capital took place during the reporting period.

2.5 'Fit and Proper' Assessment

As outlined in more detail in CSLP's dedicated Board of Director's Charter (cf. [9]), 'Fitness' and 'Properness' of relevant staff is assessed on an annual basis by the BoD, and, respectively, by the Board's Chairman. It is also the latter's duty to document and archive the corresponding questionnaires physically. Apart from general requirements such as fulfillment of internal and regulatory requirements as well as standard HR processes during and after recruiting of new staff, this 'fit and proper' assessment additionally is carried out on BoD, EM and key functions following a structured approach for specific requirements. This structured approach is based on a questionnaire where the BoD needs to assess whether, and if so, which, external (e.g. regulatory changes, changes in markets) and/or internal factors (e.g. downsizing of resources) changed in a way such that certain (individual) skill sets are not deemed sufficient anymore. In case changes are actually identified, measures need to be defined and scheduled. Within the same questionnaire, 'properness' is looked at by e.g. assessing actual/intended or potential commitment of financial or other crime or violation of laws. Questionnaires need to be filled out for the BoD (by the Chairman) and for EM and key functions by the BoD.

2.6 Risk Management System

CSLP has a Risk Management Manual (RMM) describing all relevant information and processes in the context of Risk Management (cf. [21]). The three Lines of Defense (LoD) Principle is defined in the RMM. Regular meetings between the 1st LoD and the 2nd LoD contribute to a strong awareness of responsibilities and interdependencies as e.g. taken during the annual risk identification and review process. Further roles and responsibilities are defined for the BoD, the Risk Committee and the Risk Management Function. Especially for the latter, a decomposition of risk management into risk identification, risk assessment, risk monitoring and risk appetite is used to define in detail responsibilities and processes around these components, further relying on other documents and descriptions:

- Risk identification: An extensive Risk Catalogue as contained in CSLP's RAF defines all kinds of risks, their underlying risk factors/indicators, flags each of them as relevant for CSLP (also in terms of exposure and volatility of the underlying risk factor) and whether accounted for in the Standard Formula. This Risk Catalogue is the starting point for the annual risk identification and review process but also is a key element in the annual assessment of the adequacy of the standard formula as required in the annual ORSA under Solvency II.

- Risk assessment: This – as long as deemed adequate – summarizes the key elements and logics of the standard formula under Solvency II.
- Risk monitoring and mitigation: Apart from CSLP's quarterly assessment of its capitalization under Solvency II and an annual ORSA with focus on the 4th quarter each year, it is highlighted that CSLP adheres to CS' standards and procedures with regards to identification and reporting of operational losses and incidents. Due to the nature of the business, CSLP is mainly exposed towards death risk which is largely re-insured.
- Risk appetite: CSLP's Risk Appetite Framework – apart from the above-mentioned Risk Catalogue – defines further essential elements of a sound risk management framework. The core element is the target capital ratio under Solvency II, articulated via a SCR coverage ratio-based traffic light system (formally approved during the implementation phase of Solvency II). 'Breaching' the defined thresholds might imply certain (management) action; this is assessed on a quarterly basis and discussed in CSLP's quarterly Risk Committee. CSLP further defined risk limits which however are not limits as understood in Banking via e.g. trading limits, but rather limits serving as operational controls on specific risk indicators hence thought as early warning indicators highlighting "enormous and unprecedented increase in volatility in the capital markets", cf. [14]. CSLP has defined and parameterized stress scenarios which were identified as most likely⁶ adversely impacting CSLP's capital position. These stress scenarios are run on a quarterly basis; results are compared with the regular runs and presented to the Risk Committee. CSLP follows an implicit definition of trigger events by defining an additional set of actions in case risk limits are breached. An explicit trigger event was interpreted as such when the SNB mid-January changed its intervention strategy on CHF/EUR currency pair. Upon this this trigger event, CSLP carried out additional analysis and stress tests summarized to CSLP's Risk Committee.

2.7 Own Risk and Solvency Assessment (ORSA)

CSLP's ORSA policy elements are embedded in the Risk Management Manual and contain the following main elements:

⁶ though one might intuitively think that certain market scenarios clearly push capitalization in one direction, diversification effects and specific asset allocation scenarios might pull into another direction;

- Scope & frequency:
 - 1st quarter each year: simple update of CSLP's Solvency position;
 - 2nd quarter each year: focus on model changes and updated assumptions (assumptions setting process is defined between the actuarial and the risk management function);
 - 3rd quarter each year: incorporation of CSLP's annually updated Business Plan (business inputs are used to update projection parameters for the Cash Flow projection);
 - 4th quarter each year: full ORSA report. The core elements of the annual ORSA report are presented to the Risk Committee; all BoD and RC members sign this report. This report also refers to the annual risk identification and review process, summarizes trainings and educations. Explicit approval is required for model changes, CSLP's RAF, the SF's adequacy, the annual risk identification and review and the ORSA itself.

This specific quarterly mode was designed to transparently analyze, document and report effects in an isolated manner and to prevent from losing control due to overlapping effects. The quarterly Risk Committee hence receives a transparent snapshot on a regular basis.

- Awareness and culture: The establishment of the above in 2014 continuously increased the awareness and understanding of Solvency II. Contents like the potential sale of a subset of the portfolio or a material death case are brought up by the 1st LoD to allow for an additional consideration in the context of Solvency II. Bi-lateral meetings between CEO and CRO on a monthly basis further ensure that relevant topics are shared.
- Governance & process: Ultimately, the Risk Committee, as mandated and equipped by the BoD, is the regular forum and quorum receiving information around the ORSA. Further, the entire reporting process is surrounded by strong governance elements in adherence to CS' global policy on regulatory reporting. Calculations are carried out within the policy administration system hence minimizing data distribution. Automated notifications/sign-off requests are distributed via Email to the corresponding data providers, report preparers, report owners and report reviewers. This guarantees an end-to-end auditable and traceable process preventing from manual intervention and operational mistakes.
- Risk measure: It is relied upon the standard formula, which adequacy is assessed on an annual basis. Additional analysis and tools (stress scenarios, monitoring of underlying risk factors/indicators etc.) enhance the assessment of risks and enable a holistic risk measuring.

The underlying (technical) calculation process relating to the ORSA but also to the quarterly Solvency II calculations are defined in detail in [10] and result from extensive discussion with the Actuarial Function. The Solvency coverage ratios and their usage in the traffic light system as articulated in CSLP's RAF potentially induce capital measures. The determination of the target capital levels/thresholds is based on a sensitivity analysis carried out late 2012 and was approved by the Steering Committee of the Solvency II project late 2012. No changes were applied to the target ratios since then.

Given the uncertainty around additional thresholds around the 'ladder of intervention' as potentially imposed by the national competent authorities, CSLP decided not to introduce additional capital measures (other than those currently defined) unless SCR coverage ratio would significantly and sustainably decrease. It is emphasized that CSLP's conservative capital and investment policy (cf. [7]) which requires to primarily invest in cash helps understanding Solvency requirements more from a long-term perspective. CS' Treasury department was familiarized with regards to the new regulatory capital requirements and governance around the new regime to make sure that potential short notice capital measures can be processed without further onboarding.

2.8 Internal Control System (ICS)

FINMA's circular [2008/24](#) on supervision and ICS within the banking sector is referred to here:

- The BoD is the ultimate body responsible for supervision and internal control of the company basing its supervision on regular and systematic risk analysis – CSLP has clearly defined procedures, requirements and responsibilities which are mainly documented in CSLP's BoD Charter.
- The Internal Revision is ensured by CSG's Internal Audit Function; its interaction with CSLP's BoD is defined in CSLP's BoD Charter, too.
- The Executive Management primarily, besides other duties,
 - designs adequate processes for the identification, measurement and control of its risks; CSLP relies on – and basically is obliged to rely on – various processes and tools implemented by Credit Suisse (as also referred to in CSLP's Risk Management Manual) such as, for example,
 - 'myIncidents' (reporting of operational incidents and (potential) losses (profits));
 - 'MICOS' (performing and signing off Supervisory Controls);
 - 'RCSA' (annual Risk Control Self-Assessment);
 - 'GRS' (used to assign roles and responsibilities in regulatory reporting);
 - 'GLASS' (monthly sign-off of financial accounts);
 - defines an organizational structure with clear roles and responsibilities. CSLP is well documented which is regularly assessed by Internal Audit.
- CSLP benefits from a clear three Lines of Defense model with:
 - First Line of Defense Support (FLDS) e.g. carrying out annual RCSAs, SOX control assessments, quality assurance reviews etc.
 - Second Line of Defense functions, i.e. Compliance Life but also Operational Risk Management.
 - Third Line of Defense, namely Internal Audit.

A list of policies owned and maintained by the Compliance function is quoted in the Risk Management Manual in the section on the ICS.

2.9 Outsourcing Policy

In addition to the corresponding guidelines as published by the FMA, CSLP adheres to CS' global policy on third party management (GP-00032) which, in summary, requires to

- appoint an Outsourcing Manager to supervise the Outsourcing and manage risks;
- assess business criticality (assessment of criticality), regulatory significance of Service, identify potential tax requirements;
- conduct a due diligence assessment of the supplier (service provider (risk) assessment), corresponding processes and organizational structure;
- get approval by the relevant Department Manager;
- put in place a signed written contract / agreement and deliver this into CS' central repository;
- document potential organizational and process changes;
- implement a robust governance model with adequate monitoring and oversight (regular assessment of performance against contractual agreements, annual review of outsourcing).

CSLP has translated the above mentioned global policy into its directive framework (CSLP-00003) hence explicitly implementing the requirements on a legal entity basis.

2.10 Adequacy Assessment of the SoG

The SoG is assessed and approved on an annual basis by the BoD. It is subject to regular review by Internal Audit, too.

3 CSLP's Risk Profile

3.1 Summary

CSLP's risk profile from a qualitative perspective is articulated via the Risk Catalogue as defined in CSLP's RAF, subject to annual review. Risks CSLP is exposed to need to be assessed with regards to Risk Appetite, the annual risk identification and review process (cf. [16]) and the annual evaluation of the adequateness of the Standard Formula (cf. [17]) which complements this assessment on an annual basis. An (annual) assessment of CSLP's risk profile from a quantitative perspective is interpreted to be fulfilled by the decomposition of SCR and a calculation of risk type contributions, documented in the annual ORSA report.

3.2 Risk Exposure

CSLP has a standard set of metrics and tools which it relies on in its quarterly risk assessment, in the comparison with previous periods' figures and for the reporting of risks. A top-down summary of such metrics/tools could look like that:

- Metrics:
 - SCR and MCR coverage ratio
 - Eligible and required capital SCR and MCR (and their components)
 - Absolute capital cushion SCR and MCR
 - Absolute capital surplus with regards to RAF (SCR only)
- Dimensions & tools:
 - Historical and projected values
 - Decomposition of own funds (also PVFP) and SCR
 - Risk type contributions SCR
 - Analysis of Change (analysis of incremental changes based on pre-scribed actuarial steps)
 - Stress testing (up to ten pre-defined stress scenarios)
 - Risk limits (quarterly and annual ones).

The combination of the above metrics and analytical tools serve as extensive tool to analyze CSLP's risk profile. Table 3 summarizes CSLP's risk exposure as per 4Q16 based risk type contributions after diversifications which are quite stable over time unless changes in underlying risk sensitivities were to be implemented.

	Interest Rate	Equities	Spread	Ctpy Default	FX	Mortality	Surrender	Expense	OpRisk
in %	0%	29%	2%	2%	19%	0%	44%	3%	1%

Table 3: CSLP's risk exposure as per 4Q16, measured in SCR contributions.

The upper table is based on the standard formula calculations and (correlation) parameters. Given CSLP's conservative investment policy, market risks in this type of business implicitly expose the company via a potential shortfall in earnings (PFVP).

3.2.1 Market and Credit Risks

As mentioned above, direct market risk is almost non-existent and counter-intuitively materializes via Solvency II framework's methodology which consistently also applies to unit-linked business where the PH fully bears investment risks. Credit risk arises from CSLP's re-insurer and is considered remote, too. Further credit risk, more material than as with the re-insurer, is given by CSLP's shareholder, Credit Suisse, where CSLP's SH EQ is deposited at.

3.2.2 Life Underwriting Risks

As elaborated on before, mortality risks are mainly re-insured and remaining risks within that context mainly stems from surrenders. However, this type of risk also materializes due to Solvency II framework via the vulnerability of PVFP in case of material surrender activity.

3.2.3 Operational Risks

Operational risks are inevitable and inherent to the business. CSLP's loss history does not support material exposure. It has to be noted that CSLP pre-dominantly relies on CS processes, systems and people.

3.3 Risk Concentration

As summarized in the regular evaluation of the standard formula, highlighted in each ORSA report and highlighted in Table 3, CSLP's major risk drivers are surrender risk (mass surrender), equity risks and currency risks. Mass surrender risk materializes via a sharp reduction in recurring fees (however at the

same time reducing required capital materially)⁷. Equity risks are driven by a notable share in equities on policyholder side (59% as per 4Q16) which is driven also by market movements. Given the relatively unattractive fixed income markets and some cash markets exposed to negative interest, a natural appreciation in the stock markets is reflected in CSLP's PH portfolios, too.

3.4 Risk Mitigation

CSLP is not actively mitigating market risks it is exposed to. However, CS' Group Treasury is executing so-called F/X levelling on a monthly basis on CSLP's cash balance sheet positions.

With regards to mass surrender, a potential re-insurance protection has been brought up to the attention of the RC but it was decided not to pursue such an option at the moment. The only risk mitigation actively carried out is with regards to mortality risk which is re-insured as described in CSLP's Risk Management Manual: CSLP entered into a two layer contract, the first one covering any risk above EUR 5'000 in case of death within a single policy. At a second level, a stop-loss contract ensures that CSLP is exposed to a maximum of EUR 50'000 (10 death cases) per year on portfolio level. However, any claims exceeding EUR 500'000 (100 death cases) have to be borne entirely by CSLP.

3.5 Liquidity Risk and other Risks

Given CSLP's business model and product range, the entire portfolio is considered as one line of business. As above is elaborated on with regards to CSLP's risk profile (risk type contributions wrt. SCR), this section refers to CSLP's own books only.

3.6 Risk Sensitivity

CSLP has analyzed in detail various hypothetical stress scenarios and decided to regularly assess the impact of adverse stress scenarios as listed in Figure 2.

⁷ it has to be said that the overall impact is difficult to foresee as diversification effects and asset allocation drive the interplay between PVFP and SCR. A sharp reduction in PVFP per se does not consistently induce a decrease in capital coverage ratios.

- Scenario 1.1: **EUR/CHF Unlink**
- Scenario 2.1: **USD Crash**
- Scenario 3.2: **Equity Crash**
- Scenario 4.2: **Widening Spreads**
- Scenario 5.1: **Mass Lapse DE**
- Scenario 5.2: **Mass Lapse IT**
- Scenario 7.0: **OpRisk Loss**
- Scenario 9.0: **Top100 Event & RI Default**

Figure 2: Stress Scenarios CSLP regularly runs.

A detailed definition of such scenarios is contained in CSLP’s RAF, cf. [20]. Fluctuations of the components of Own Funds and SCR when hit by material stresses are analyzed on a quarterly basis which serves as regular assessment of CSLP’s sensitivity towards risks.

3.7 Invested Assets

In alignment with CSLP’s Investment and Capital Management Policy, cf. [7], CSLP’s own funds are invested in a very conservative way, solely cash as per 4Q16, and as depicted in Figure 3. According to CSLP’s Business Plan as per 3Q16, no changes are expected. Given CSLP’s business model of solely selling unit-linked life insurance, the ‘prudent person principle’ with regards to invested assets can be boiled down to how own funds are invested. In the below tables we depict the asset allocation in absolute terms for SH EQ for 3Q16 – 4Q16 (on the left-hand side wrt. currencies, on the right-hand side wrt. asset types). The share in cash assets continuously as per year-end is 100%, for the remaining quarters in 2016 did not fall below 96% (cannot be seen here and is due to a residual part invested in equities via seed money into Life TiP funds (all matured by end 2016)). CSLP’s exposure re CHF/EUR is driven by tax on technical reserves and overlaid by FX fluctuation.

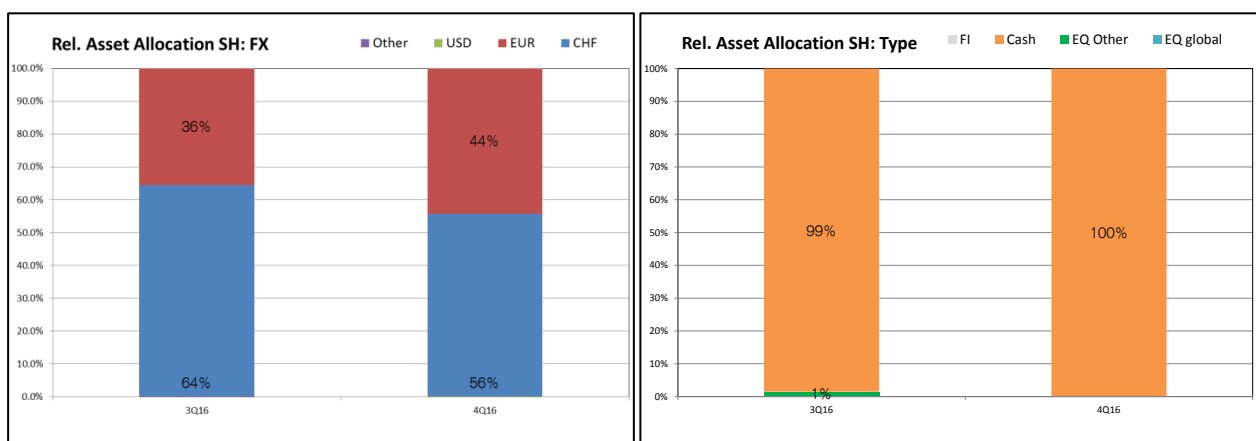


Figure 3: Asset Allocation Own Funds 3Q16 and 4Q16, FX (lhs) and Asset Class (rhs).

4 Valuation for Solvency Purposes

4.1 Valuation of Assets

CSLP's business focus on unit-linked life insurance business only and its legal entity structure with respect to CS allows summarizing the valuation of assets as follows:

- CSLP's client relationships are based on segregated accounts, i.e. CSLP maintains dedicated and separate accounts per policy. This ensures that underlying assets can consistently be attributed to the corresponding policy.
- CSLP has defined internal investment guidelines (especially in relation to its collaboration with External Asset Managers (EAMs)) clearly outlining allowed investments. Such guidelines are part of the outsourcing agreements and are monitored by Insurance Management Operations.
- CSLP minimizes the risk of illiquid assets by only accepting assets which exhibit a value, i.e. allow liquidation within short-term horizon explicitly excluding real estate and arts, for example.

Valuation of assets fully relies upon CS standards itself defined by its global policy P-00852. Residual risk induced by unforeseeable shortfalls in values as e.g. in Madoff-related assets, actually fraud, is difficult to quantify. More concretely, due to the limited range of products and markets and the business per se, we restrict this view to the total value of assets and liability.

Total assets are obviously dominated by assets held for unit-linked funds making up more than 97%, with more details on positions exhibiting materiality:

- **R0040 – Deferred Tax Assets, CHF 75m:** induced by tax on technical reserves due via CSLP's Italian branch (cf. Section 1.6)
- **R0220 – Assets held for index-linked and unit-linked contracts, CHF 5'369m:** aggregated assets under policy;
- **R0270 – Reinsurance recoverables, CHF -13m:** is the present value of projected recoverables from reinsurance contract (please note the negative sign, i.e. under best estimate conditions reinsurance is expected to destroy value);
- **R0380 – Receivables (trade, not insurance), CHF 4m:** representing income fees accrued and not yet received from Clients;
- **R0410 – Cash and cash equivalents, CHF 89m:** pre-dominantly SH EQ invested (purely Cash) with remaining positions resulting from current accounts on surrendered policies not settled at that time;
- **R0420 – Any other assets, not elsewhere shown, CHF 27m:**

Total liabilities are primarily made up by:

- **R0690 – Technical Provisions on index-linked and unit-linked, CHF 5'291m:** thereof Best Estimate Liability after reinsurance on modelled business of CHF 5'262m and Risk Margin CHF 29m;
- **R0850 – Subordinated Liabilities (not in basic own funds), CHF 44m:** aggregated amount of loans to support funding of DTA (grantor: CS AG);
- **R0900 – Any other liabilities, not elsewhere shown, CHF 66m:** thereof Best Estimate Liability on non-modelled business of CHF 18m and payables and other short-term liabilities of CHF 48m.
- **Own Funds, CHF 162m:** consisting of paid-in share capital, retained earnings and present value of expected future profits; less risk margin;

4.2 Valuation of technical Provisions

CSLP's business model is seen as only having one material line of business and without contracts exhibiting options and guarantees.

		Insurance with profit participation		Index-linked and unit-linked insurance	
		C0020	C0030	Contracts without options and guarantees	Contracts with options or guarantees
				C0040	C0050
Technical provisions calculated as a whole	R0010		0.00		
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP calculated as a	R0020				
Technical provisions calculated as a sum of BE and RM					
Best Estimate					
Gross Best Estimate	R0030			5'249'371'580.63	0.00
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0080			-13'120'441.84	
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	R0090			5'262'492'022.46	
Risk Margin	R0100		28'568'149.24		
Amount of the transitional on Technical Provisions					
Technical Provisions calculated as a whole	R0110				
Best estimate	R0120				
Risk margin	R0130				
Technical provisions - total	R0200		5'277'939'729.86		

Figure 4: S.12.01.02.01: Life and Health SLT Technical Provisions.

Changes in underlying assumptions other than those pre-scribed by the standard model or by markets (F/X rates) during the reporting period solely relate to operational assumptions with surrender rates as representing the only driver where a reportable change is recorded.

No difference exists between methods and assumptions made for the valuation for solvency purposes and valuation for financial statements. Neither volatility adjustment, nor matching adjustment has been applied to the yield curves used.

4.3 Valuation of Other Liabilities

Other liabilities are loans and temporary accounts which are reported as notional.

4.4 Key Differences between statutory and Solvency Closing

As outlined in [14] and following the assessment of the Appointed Actuary as well the Central Actuary Function, using US GAAP closing for all (quarterly) Solvency II calculations is deemed reasonable as reflecting local statutory figures with adaptations representing an economic view. Main differences are due to booking of provisions made for legal cases (but also with regards to DAC/URL as would be seen in consolidated US GAAP):

- statutory: (claim amount – NAV) * probability of loss **IF** probability of loss $\geq 50\%$
- US GAAP: claim amount – NAV **IF** probability of loss $\geq 70\%$

5 Capital Management

5.1 Own Funds

As per 4Q16, figures as filed to the regulator and quoted in Figure 5 can be summarized as follows, accounting for materiality:

- **R0010 – Ordinary Share Capital, CHF 15m:** no changes as compared with 4Q15.
- **R0130 – Reconciliation Reserve, CHF 73m:** is the remainder of Own Funds after deducting ordinary share capital.
- **R0160 – An Amount equal to the Value of net DTA, CHF 75m:** cf. Section 1.6.
- **R0290 – Total basic own Funds after Deductions, CHF 162m:** The total basic Own Funds (OF) is an aggregate of
 - CHF 85m (SH EQ (including retained earnings, shown in Table 4)),
 - + CHF 106m (PVFP, shown in Table 4)),
 - CHF 29m (Risk Margin)
 while CHF 75m is classified as Tier-3 (corresponding to the entire amount of DTA) and the remainder, CHF 88m classified as Tier-1.
- **R0540 – Total eligible own Funds to meet the SCR, CHF 99m:** calculates as the CHF 88m mentioned above (Tier-1), enhanced by the eligible amount of Tier-3, allowed as 15% portion of SCR to underpin SCR, i.e. $0.15 * 75m = 11m$, yielding CHF 99m
- **R0550 – Total eligible own Funds to meet MCR, CHF 88m:** this amount corresponds to the Tier-1 amount of available funds.
- **R0580 – SCR, CHF 74m:** SCR as calculated on standard formula with resulting SCR coverage as contained in **R0620**.
- **R0600 – MCR, CHF 33m:** Minimum Capital Requirement as calculated on standard formula with resulting MCR coverage as contained in **R0640**.

		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
Basic own funds before deduction for participations in other financial sector as foreseen in article 68 of Delegated Regulation 2015/35						
Ordinary share capital (gross of own shares)	R0010	15'000'000.00	15'000'000.00		0.00	
Share premium account related to ordinary share capital	R0030	0.00	0.00		0.00	
Initial funds, members' contributions or the equivalent basic own - fund item for mutual and mutual-type undertakings	R0040	0.00	0.00		0.00	
Subordinated mutual member accounts	R0050	0.00		0.00	0.00	0.00
Surplus funds	R0070	0.00	0.00			
Preference shares	R0090	0.00		0.00	0.00	0.00
Share premium account related to preference shares	R0110	0.00		0.00	0.00	0.00
Reconciliation reserve	R0130	73'017'001.30	73'017'001.30			
Subordinated liabilities	R0140	0.00		0.00	0.00	0.00
An amount equal to the value of net deferred tax assets	R0160	74'481'258.00				74'481'258.00
Other own fund items approved by the supervisory authority as basic own funds not specified above	R0180	0.00	0.00	0.00	0.00	0.00
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds						
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds	R0220	0.00				
Deductions						
Deductions for participations in financial and credit institutions	R0230	0.00	0.00	0.00	0.00	
Total basic own funds after deductions	R0290	162'498'259.30	88'017'001.30	0.00	0.00	74'481'258.00
Ancillary own funds						
Unpaid and uncalled ordinary share capital callable on demand	R0300	0.00			0.00	
Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual - type undertakings, callable	R0310	0.00			0.00	
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds						
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds	R0220	0.00				
Deductions						
Deductions for participations in financial and credit institutions	R0230	0.00	0.00	0.00	0.00	
Total basic own funds after deductions	R0290	162'498'259.30	88'017'001.30	0.00	0.00	74'481'258.00
Ancillary own funds						
Unpaid and uncalled ordinary share capital callable on demand	R0300	0.00			0.00	
Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual - type undertakings, callable	R0310	0.00			0.00	
Unpaid and uncalled preference shares callable on demand	R0320	0.00			0.00	0.00
A legally binding commitment to subscribe and pay for subordinated liabilities on demand	R0330	0.00			0.00	0.00
Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC	R0340	0.00			0.00	
Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC	R0350	0.00			0.00	0.00
Supplementary members calls under first subparagraph of Article 96(3) of the Directive	R0360	0.00			0.00	
Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0370	0.00			0.00	0.00
Other ancillary own funds	R0390	0.00			0.00	0.00
Total ancillary own funds	R0400	0.00			0.00	0.00
Available and eligible own funds						
Total available own funds to meet the SCR	R0500	162'498'259.30	88'017'001.30	0.00	0.00	74'481'258.00
Total available own funds to meet the MCR	R0510	88'017'001.30	88'017'001.30	0.00	0.00	
Total eligible own funds to meet the SCR	R0540	99'100'434.10	88'017'001.30	0.00	0.00	11'083'432.79
Total eligible own funds to meet the MCR	R0550	88'017'001.30	88'017'001.30	0.00	0.00	
SCR	R0580	73'889'551.96				
MCR	R0600	33'250'298.38				
Ratio of Eligible own funds to SCR	R0620	134.12%~				
Ratio of Eligible own funds to MCR	R0640	264.71%~				

Figure 5: S.23.01.01.01, Own Funds.

Table 4 lists the components of Eligible Capital SCR from a Solvency II perspective (regarding the asset allocation with regards to currencies and asset classes, we refer to Figure 3. How EC SCR is expected to develop over time is reflected in the three year projection as part of the quarterly Solvency II calculations and in alignment with CSLP's annual Business Plan. Besides its usual business activities, there are no other plans to redeem or raise capital.

While SH EQ continuously increased due to retained earnings, PVFP exhibits some volatility due to various and partially offsetting effects such as surrender activity, policy mix (traded endowment policies all matured by end of 2016), asset allocation and market fluctuation. The risk margin is linked to the SCR, capital constraints are driven by changes in DTA in EUR and, as a consequence, by FX fluctuations of CHF versus EUR.

in CHFm	2014	2015	2016
Eligible Capital SCR	107.9	104.1	99.1
PVFP	128.1	115.4	106.3
SH EQ	75.8	79.2	84.8
Thereof: Own Capital	15.0	15.0	15.0
Risk Margin	-34.0	-30.4	-28.6
Capital Constraints	-62.0	-60.2	-63.4

Table 4: Decomposition Eligible Capital SCR of CSLP 2014-2016.

The reduction in EC SCR over time is driven by the reduction in PVFP (itself decreased as mentioned above due to various effects), partially offset by a continuous increase in SH EQ.

5.2 Required Capital

SCR as per 4Q16 equals CHF 74m (a small decrease of CHF 3m / CHF 9m when compared with 4Q15 / 4Q14), mainly linked to the reduction in PVFP.

Figure 6 shows a risk type-based decomposition of SCR with the aggregated diversification effect, i.e. accounting for pre-scribed correlation and applying Variance-Covariance aggregation (reversely). It highlights that CSLP is mainly exposed towards equity, FX and lapse risk.

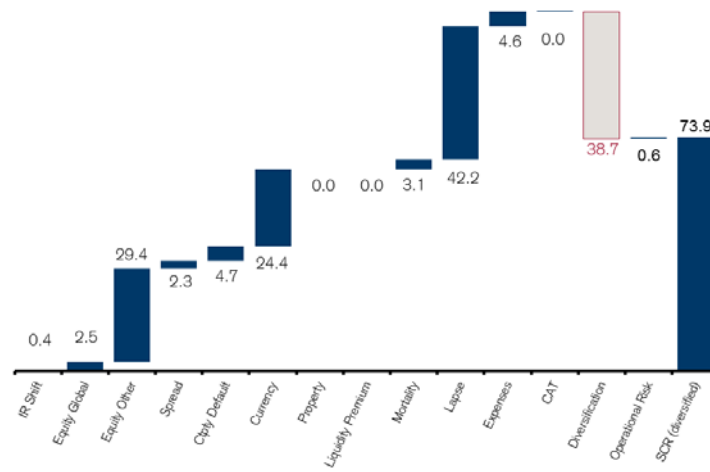


Figure 6: Decomposition of SCR as per 4Q16.

With regards to MCR, the upper limit of the linear constraint applies and sets MCR at 45% of CSLP's SCR.

5.3 Capital Management: Other Information

CSLP's Italy Branch according to Art. 1(2) of [Decree Law 209](#) (24-September-2002) is required to yearly pay Tax on technical Reserves (TotR) with a current rate of 45 bps. This 'tax credit' which in fact is increasing every year, can be (partially) offset by:

- i. Ordinary recovery: As TotR basically is an advance payment by CSLP, it can be offset with any payment of Tax on Policy Income CSLP does on behalf of the policyholders (PH) following full or partial redemption of any life insurance policy. Process-wise, CSLP withholds such amounts from the (taxable) sum paid to the PH in order to offset it in the subsequent month with the TotR previously paid. TotR is based on previous year-end's TR, due end of June the following year.
- ii. Further recovery: In case the aggregated amount of TotR exceeds that aggregate amount of Tax on Policy Income paid in the 5th year following that year, this amount, the "Qualified Surplus", is eligible to further recovery, i.e. can be offset either with income taxes, social security charges and other taxes paid by CSLP (including TotR, Ruling 146/E of 16 April 2008), or, transferred to a controlled company. The latter has been intensively evaluated and discussed during 2014 but even in case a Tax Ruling (which actually would be needed) would be in favor of such a transfer, it practically turned out not to be an option as the relevant threshold on the Bank's side is materially exceeded already and there is no incentive to establish such a (regular) transaction.

Given that the cash flow induced by the TotR is a material amount due end June, a sudden but temporary drop in coverage might be observed with 2QYY figures *ceteris paribus*. After 2QYY and under normal business circumstances, coverage usually increases towards year-end and can thus the entire annual path can be seen as a wavelike movement. This wavelike picture is considered an artifact and has to be considered in the context of target capital ratios, i.e. implications and potential actions need to be isolated therefrom.

It has to be emphasized that this would not be transparent in case looked at capital coverage on an annual basis only.

6 References

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- [4] Credit Suisse: [Regulations of Internal Audit](#).
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- [8] CSLP: Appointed Actuary – Outsourcing Individual Mandate.
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