IVASS
ISTITUTO PER LA VIGILANZA
SULLE ASSICURAZIONI

Ref. N. N. 0143142/21 of 14/07/2021

SUPERVISORY REGULATIONS AND POLICIES DIRECTORATE
INSPECTION DIRECTORATE
PRUDENTIAL SUPERVISION DIRECTORATE

Ref. to note no. of

Classification III1 1
Annexes no.

To the insurance and reinsurance undertakings with head office in Italy

To the Ultimate Parent Undertakings whose head offices are located in Italy

To the Italian Branches of insurance and reinsurance undertakings having their head office in third countries with respect to the European Economic Area
TO THEIR PREMISES

Subject Valuation and prudential treatment of investments in complex and/or illiquid financial instruments.

In the first five years of application of the prudential rules introduced by Solvency II, the context of particularly low, sometimes negative, interest rates has consolidated and worsened. This has led operators, in search of a higher return on their investments, to increase - directly or through units in collective investment undertakings or instruments issued by other vehicles - the portion of the portfolio invested in complex assets, which are exposed to multiple risk factors.

The inspections conducted by the Institute during this period showed that the increase in the share of complex investments has not always been accompanied by the necessary strengthening of tools to identify, measure and manage the risks associated with such investments. In particular, there were widespread shortcomings in the risk governance systems, in the methods used to identify and assess the actual risk factors, in the pricing and control systems, and in the methods used to calculate the capital absorption of these assets.

The Institute therefore considers it necessary to remind supervised companies to adopt correct methods for the prudential treatment of investments in complex and/or illiquid financial instruments[1].

The holding of such assets in the portfolio, which is permitted for all companies, whether they have an internal model or use the standard formula for calculating capital requirements, requires full and concrete compliance with the following requirements:

- compliance with the prudent person principle;

[1] For example, securities or derivatives that are structured or in any case have optional components, securities with other debt instruments as their underlying, Credit Linked Notes, Collateralized Debt Obligations, Commercial Mortgage Based Securities, securities without an active market or with pricing parameters that are difficult to observe, etc. By way of reference only, reference should be made to the table in para. VI of the Guidelines on Complex Debt Instruments and Structured Deposits, ESMA 2015/1787 of 4/2/2016.

- implementation of an effective risk management system;
- independent determination of the fair value of illiquid or complex instruments.

At the same time, it is essential for the companies that use it that the correct use of the standard formula is continuously checked in the ORSA process. This involves both ascertaining that the business risks are adequately represented and weighted and that the standard formula itself is suitable for representing the risk profile of the individual company[2].

The annexed document recalls, also through the use of concrete examples, the reference legislative and regulatory provisions, as well as the criteria that must inspire companies in the identification of risk factors, in the classification and valuation of financial instruments, in the calculation of the capital requirement when operating under the standard formula.

This does not affect the obligation of the Administrative Body to arrange for the prompt removal of any shortcomings in the systems for risk underwriting, measurement and control and in the calculation of capital requirements, and to ensure compliance with the instructions in this note.

IVASS will continue the monitoring activity currently underway, by means of off-site analysis and on-site inspections, adopting the most appropriate supervisory measures to remove organizational shortcomings and remedy the insufficient capital safeguards set up for such investments, including the application of capital add-ons referred to in articles 47-sexies and 216-septies of the CAP, the purpose of which is to ensure that the regulatory capital requirements adequately reflect the overall risk profile of the insurance or reinsurance company or of the relative group to which it belongs.

This note must be brought to the attention of the Administrative Body, Top Management and bodies with control functions.

Best regards.

BY DELEGATION OF THE JOINT DIRECTORATE

Firmato digitalmente da
ALBERTO CORINTI

2 Art. 45 Dir. 2009/138/EC

ANNEX

1. Governance of financial risks associated with illiquid/complex investments

Investments in illiquid or complex financial instruments expose the company to two distinct risks:

- inaccurate determination of the fair value of these instruments in the Solvency II financial statements, with consequent effects especially on the correct representation of own funds;
- inadequate identification and measurement of all the risk factors to which these instruments are exposed, which is reflected in the correct application of shocks when determining the SCR.

In this regard, it is recalled that:

a) the **administrative body** is responsible for defining organizational and procedural structures that guarantee a solid system for detecting and measuring risks, as well as for the conscious adoption of criteria and methods for evaluating the relevant quantities. For this purpose, it is necessary that the administrative body: i) ensures that the policies and procedures for the evaluation of investments are consistent with the characteristics of the portfolio and contain at least the elements required by article 4 of Regulation 34/2017; ii) receives prompt and full disclosure of financial risk measurement systems; iii) constantly monitors the adequacy of the resources, processes and methodologies adopted for this purpose, avoiding generic acknowledgements of the activities carried out and the decisions taken by management;

b) the **risk management function** must have adequate resources and expertise in relation to the complexity of the portfolio and provide the administrative body with its opinion on the reliability of the data used as well as on the entire range of methodologies adopted for the assessment of the aforesaid risks and for the calculation of solvency;

c) the **internal audit function** must periodically assess the effectiveness of the organizational structures defined by the administrative body and of the activities carried out by the risk management function.

Investment choices in complex assets lead to the need for strengthened governance and control structures; as already expressly pointed out (see para. 1.1.3) in the Letter to the Market of 5 July 2018[3], the complexity of asset management strategies in fact requires the adoption of particularly articulated and stringent organizational safeguards.

2. Prudent person principle

The general principles on investments and, in particular, the associated market and counterparty risks, require that, in accordance with the prudent person principle[4], companies invest only in assets and instruments whose risks they are able to properly identify, measure, monitor, manage, control and report, and take them into account as appropriate in the assessment of overall solvency needs[5].

[3] Letter to the market of 5 July 2018, IVASS Guidelines on the application of the proportionality principle in the corporate governance system of insurance and reinsurance undertakings and groups

[4] Art. 132, paragraph 2, Dir. 2009/138/EC, art. 37 ter of the CAP and related implementing regulations issued by IVASS

[5] Art. 30-ter, paragraph 2, letter a) of the CAP and related implementing regulations issued by IVASS

The assessment of the suitability of the corporate structures to carry out an effective control of the risks deriving from investments must, therefore, be carried out before they become part of the portfolio and then during the life of the investment.

The purpose of this requirement is to guide the company both in the choice of assets in which to invest, in line with its risk profile, and in the self-assessment process aimed at determining its solvency requirement. The investment choices, consistent with the requirements of safety, quality, liquidity and profitability[6], must be such as to enable the corporate structures to identify, assess and manage the risks involved in every aspect provided for by the regulations.

3. Risk management system proportionate to the complexity of risks

The regulations require[7] that processes and methodologies for identifying and managing risks be proportionate to the complexity of the business. This requirement is particularly important in the case of companies that use the standard formula and hold portfolios of complex financial instruments, such as to expose them to risks that are not easily traceable to the parameters provided by the various sub-modules into which the standard formula is divided[8].

First of all, attention is drawn to the need for the company to identify complex assets in advance in its investment policy, in view of its system of internal controls and risk management, and the related limits[9].

In such cases, it is necessary to assess whether the risk profile deviates from the assumptions underlying the calculation of the Solvency Capital Requirement according to the standard formula and whether this deviation is significant. In fact, even under the standard formula, companies must adapt their structures and processes for identifying, assessing and managing investment risks to the complexity of the portfolio. In this context, the criterion of proportionality is not to be understood as limiting the resources allocated to such activities in proportion to the size of the company, since it requires that the greater complexity of the investment portfolio is matched by a greater use of resources, both human and material, allocated to monitoring the related risks.

It follows from all the above that the companies that calculate the capital requirement with the standard formula, not operating a precise calibration of the requirement necessary for their specific risk profile as happens for companies that use an internal model, are required both to adapt their investments to their capacity to effectively monitor the risks, and to guarantee that their investment risk management and control structures are able to adequately identify the assets, to independently determine their fair value and to attribute them to the appropriate risk module for the purposes of calculating the prudential requirement. In this regard, the use of simplifications should be limited to that which is expressly permitted by the regulations, excluding the use of simplifications justified by inadequate risk analysis and measurement capabilities.

4. Alternative valuation methods

The use of asset valuation methods that guarantee a correct determination of the fair value of such assets[10] is important for the purposes of determining the

6 Art. 37 ter, paragraph 2 lett. b) of the CAP
7 Art. 37-ter paragraph 2 letter a) and art. 30-ter paragraphs 2 lett. a) and 3) of the CAP
8 Directive 2009/138/EC recital (67)
9 Art. 5, paragraph 1, lett. h) and o) of IVASS Regulation no. 24/2016
10 Art. 9 of Del. Reg. (EU) 2015/35

prudential requirement, as it allows the application of the shocks of the standard formula on reliable values; this applies, in particular, to unlisted financial instruments or those listed on inactive markets.

The relevance of these methods for the determination of own funds is even greater. Given that investments in assets not admitted to trading on a regulated market must in any case be maintained at prudent levels[11], the internal control system must adapt to the complexity of the risks deriving from the company's investment choices, through full compliance with valuation rules[12]. In the presence of complex or illiquid investments without prices quoted in active markets, the difficulties in valuing the multiple optional components or the credit risk of a plurality of counterparties, or the lack of significant values for the reference parameters (credit spread, volatility, correlation, etc.) cannot exempt the company from complying with the aforementioned valuation rules.

In such cases, recourse must be made to the safeguards set out in articles 263 and 267 of Delegated Regulation (EU) 2015/35 with adoption of the procedures and controls set out in IVASS Regulation no. 34/2017.

In particular, in the presence of investments valued using alternative methods[13] and all the more so the greater the incidence of the latter on the portfolio, attention is drawn to the need for scrupulous compliance with the precautions provided for by articles 6 and 7 of IVASS Regulation 34/2017, which aim - among other things - to ensure that the company is fully aware of any valuation uncertainties associated with such methods[14] and is able to ensure the performance, on an ongoing basis, of tests and comparisons suitable for assessing the reliability of the method as well as, periodically, an independent verification of the method itself. These requirements are not replaced by the use of databases of professional providers (including, *a fortiori*, periodic data provided by the issuer), as in this case the obligation remains to independently ascertain, document and periodically test the reliability of the data received and its suitability to be used as the basis for prudential assessments, ensuring that it is representative of all the risks included in the individual investment[15].

5. Look-through method

The Institute, with IVASS Regulation no. 28/2016, has regulated the application of the look-through method referred to in article 84 of Delegated Regulation 2015/35 (EU). During the inspection activity, however, calculation methods were found that sometimes did not comply with these standard formula regulations.

11 Art. 37-ter, paragraph 3, lett. b) of the CAP

12 Articles 263 and 267 of Del. Reg. (EU) 2015/35, IVASS Reg. 34/2017

13 Art. 10 Del. Reg. (EU) 2015/35

14 It is in fact necessary, for example, that the contractual characteristics, and therefore the risk drivers, of the instrument are captured by the valuation method (providing for possible valuation adjustments if this is not the case); that the market data used for pricing is obtained from liquid markets, with prices representing actual trades or binding offers; that the presence of unobservable data (or data not based on market information) is adequately taken into account, e.g. by examining price sensitivities to unobservable inputs)

15 The adequate implementation of pricing models is strengthened in the presence of competing valuations, carried out on the basis of other models or by backtesting analyses aimed at confirming, on the basis of transactions actually carried out, the ability of the model to replicate the exchange prices of such assets on the market

First of all, it should be noted that the reiteration of the look-through referred to in article 5 of IVASS Regulation no. 28/2016 also applies where investment funds or other similar structures contain complex securities, also other than funds, which have optional or derivative components.

For example:

Units of UCITS containing instruments denominated in foreign currency but valued in Euro, with currency risk hedged by derivatives

In this case, the default SCR on the credit risk of the counterparty to derivatives should be calculated for the value of that exposure[16]. With regard to the application of simplification by means of target allocation[17], it should be noted that it requires the presence of all the requirements provided by the rule itself. Therefore, in order for the use of this simplification to be justifiable, it must be demonstrated that:

- target allocation is available to the company at the level of granularity required to calculate all relevant sub-modules and scenarios of the standard formula
- underlying assets are managed strictly according to target allocation
- simplification is used on a prudential basis and does not involve more than 20% of the company's assets.

Lastly, it should be noted that the rules set forth in article 84, paragraph 2, of Delegated Regulation (EU) 2015/35 are intended to be applied in cases of naturally "indirect" exposures, such as those presented by UCITS, which in themselves cannot be valued in terms of risk without examining their composition and verifying the nature of the financial instruments they contain.

In any case, it is not permitted to replace a direct exposure to market or counterparty risks (e.g. bond) with the different exposure of the "underlying assets" by choosing to calculate the requirement on the "indirect" exposure instead of the direct exposure. Since the purpose of the look-through method is to identify all relevant risks to which the company holding a financial instrument is exposed[18], this does not mean that the additional risks that can be deduced from the qualitative analysis of an investment should not be assessed[19].

For example:

Unrated note issued by an SPV that holds an inflation-indexed EU government bond and has entered into a derivative with a banking counterparty to convert the bond coupon flow from indexed to fixed. The Italian government security represents collateral for the bank counterparty while other government or corporate securities represent collateral for the vehicle. The flow from the swap is paid by a paying agent to the noteholders.

Specifically, in the example described, the calculation of the solvency requirement under the bond and loan spread sub-module should relate to the characteristics (rate, duration, issuer creditworthiness, collateral) of the note, and not

16 Art. 189, paragraph 2, Del. Reg. (EU) 2015/35
17 Art. 84, paragraph 3 of Delegated Regulation 2015/35 (EU)
18 EIOPA-BoS-14/171, Guidelines on look-through approach
19 Art. 5, paragraph 2, letter b) point 5 of IVASS Regulation no. 24/2016

to those of the "underlying" government security (which would allow zero capital absorption for bond and loan spread risk)[20].

6. Identification of risk factors to which investments are exposed

Given the need for an accurate assessment of the compatibility of complex investments with the risk profile of the liabilities, we reiterate that for solvency calculation purposes all risks inherent in such instruments must be identified, analyzed and adequately valued.

Some bond financial products are so complex that it is difficult, or in any case not immediate, to identify the module (market risk, counterparty risk) or sub-module of market risk to be used for the correct application of shocks on the basis of regulatory provisions or the selection of parameters to be used in the application of shocks.

This is the case, for example, with unrated securities issued by SPVs, which incorporate financing transactions and are presented as having collaterals. Complex structures such as those mentioned do not exempt the insurance company that purchases the securities issued by a party that does not have assets, from making an in-depth assessment - by acquiring all the necessary contractual documents - of the origin of the financial flows of the securities subscribed, which usually derive from underlying assets and from commitments by third parties. This is done in order to measure and consider all counterparty risks to third parties involved in the transactions[21] and to ensure that the collateral complies exactly with the requirements of articles 1, paragraph 26, and 214 of Del. Reg. (EU) 2015/35.

In some cases, the structure given to the security is such that it is misleading for prudential treatment.

For example:

Unrated, non-exchangeable securities issued by SPVs through "securitization" without tranching[22] of loans acquired through the cash provided by the subscriber in exchange for the securities. The coupons of the securities are paid by means of flows deriving from the payments of matured loans or from the same countervalue paid for the note. Repayment at maturity is limited to the value of the receivables collected.

The genesis of the transaction is reversed with respect to that typical of securitization, in which it is the originator of the credit that takes action to transfer positions that would otherwise not be negotiable to other investors. Instead, the purchaser of the notes bears the entire underlying risk, exactly as if, in the presence of segmentation, the purchaser had purchased all the tranches possibly marketed: this risk is exclusively that loans "securitized" are not, for various reasons, collected within the agreed terms. The profit or loss of the transaction cannot be influenced by market factors, since only at maturity, on the basis of the quantity of loans collected, is the extent of the gain determined with respect to the price

20 Along these lines, also EIOPA, in a Q&A dealing with a similar case study (Question ID 1793, date of submission 14 February 2019), specifies that notes issued by an unrated SPV and collateralized with government securities cannot inherit the CQS of the underlying government securities.

21 By way of example, the calculation agent, custodian agent, disposal agent, issuing agent, paying agent, etc., are the most common.

22 The requirement of segmentation is provided for in article 4, para. 1, point 61, of Regulation (EU) no. 575/2013, recalled by art. 1, point 19 of Del. Reg. (EU) 2015/35

of purchase at a discount; what is due at maturity is simply the total of the amounts collected. Therefore, this instrument is not exposed to the risk of changes in any market factors captured by the shock of the bond and loan spread sub-module.

In this case, the mechanical application of the prudential treatment using the spread sub-module for bonds and loans does not appear to be appropriate to the actual risk incurred by the underwriter; therefore, the valuation must take place on the basis of a reasoned and documented expert opinion pursuant to article 2 of Delegated Regulation (EU) 2015/35, which allows to capture the actual risk profile of the investments, which is not adequately represented in the standard formula due to their complex structure.

Similar considerations apply in all those cases in which the securities have substantial characteristics that differ from the form in which they were structured and which, due to the economic substance and the actual risk profile, are not immediately reflected in the provisions of the standard formula (non-exhaustively, with reference to the substance of the transaction: non-marketable notes, securitizations without tranching underwritten in full, separate securitizations of individual loan tranches, securities embedding commodity-backed loans, synthetic securities of loans granted on a revolving credit facility).

In addition, particular attention should be paid to cases in which the quality of the creditworthiness of the party obliged to provide the cash flows of the security is questionable, for example because they constitute fulfilment of repayment obligations for loans subject to forbearance by a bank.

7. Risk mitigation techniques with a duration of less than 12 months

Adequate attention must be paid to the suitability of the risk mitigation techniques to be fully considered in the calculation of the Solvency Capital Requirement, in accordance with the provisions of article 209, paragraph 2, of Del. Reg. (EU) 2015/35 on interim hedging.

For example:

A hedge of foreign exchange risk through derivatives (including within a complex financial product), entered into with a renewable quarterly term under the same conditions, and effective in the first quarter following the reference date, is eligible to be fully used in the calculation of the requirement, provided that all qualitative criteria set out in article 209, paragraph 3 of Delegated Regulation (EU) 2015/35[23] are met. Otherwise, it should be considered at a reduced rate, applying a coefficient of 25%.

[23] In particular:
(a) the insurance or reinsurance undertaking has a written policy for the replacement of the risk mitigation technique;
(b) the replacement of the risk mitigation technique shall not take place more often than every three months;
(c) the replacement of the risk-mitigation technique is not conditional on any future event, which is outside of the control of the insurance or reinsurance undertaking. Where the replacement of the risk-mitigation technique is conditional on any future event, that is within the control of the insurance or reinsurance undertaking, then the conditions should be clearly documented in the written policy referred to in point a);

Where hedges are in place for a period of time shorter than 12 months after the reference date for the calculation of the requirement, if not all the qualitative criteria laid down in paragraph 3 of article 209 of the said Regulation are met, the mitigation effect should be taken into account in the Basic Solvency Capital Requirement only to the extent proportional to the shorter period of time between the full duration of the risk exposure and the period during which the risk mitigation technique is in place. It should be stressed, in particular, that if the renewal of the hedge is subject to market conditions, the risk that the cost of replacing the risk mitigation technique will increase over the following 12 months should be properly calculated and taken into account in the Solvency Capital Requirement.

8. Appropriate asset classification

It is necessary to ensure adequate, analytical and consistent classification of assets and accurate compilation of QRTs. To this end, it is essential to ensure that each asset is attributed its exact Complementary Identification Code (CIC)[24]. In this regard, the reliability of the data used to calculate the Solvency Capital Requirement must be carefully checked, verifying the correspondence between the securities included in each asset class and the values grouped by relative CIC codes.[25]

(d) the replacement of the risk mitigation technique be realistic based on replacements undertaken previously by the insurance or reinsurance undertaking and consistent with its current business practice and business strategy;

(e) the risk that the risk mitigation technique cannot be replaced due to an absence of liquidity in the market is not material;

(f) the risk that the cost of replacing the risk-mitigation technique increases during the following 12 months is reflected in the Solvency Capital Requirement;

(g) the replacement of the risk-mitigation technique would not be contrary to requirements that apply to future management actions set out in Article 23 (5).

24 Implementing Regulation (EU) 2015/2450 of 2/12/2015 Annex V

25 See, for Q&A on CIC attribution, https://www.eiopa.europa.eu/content/qa-regulation-0_en