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Loss absorption by capital instruments RT1 CoCos, Tier 2 and Tier 3 on the grounds of Solvency II and IRRD

Abstract

The paper treats on loss absorbing capacity of issuers' RT1, Tier 2 and Tier 3 subordinated debt. The Solvency II loss absorbing capacity of RT1 CoCos (*contingent convertibles*) varies from that of IRRD proposal. The main objective was to set the insurer's *point of non-viability* (PONV) and then compare it to RT1 contractual trigger event in various scenarios of breaching Solvency II capital requirements. It turns out that contractual trigger is activated prior to reaching the PONV, so one may conclude that RT1 absorb losses on a going-concern basis.

Key words: IRRD, resolution, Solvency II, capital instruments, CoCos, Restricted Tier 1, RT1

JEL Codes: G22, G28

Introduction

Restricted Tier 1 (RT1) CoCos market started in 2016, when Gjensidige Forsikring issued RT1 denominated in Norwegian kroner as the first European insurance undertaking. It was followed by RSA and Dutch ASR with the first RT1 issue in euros. These securities contain a unique mechanism of going-concern loss absorption, i.e. during the normal functioning of the issuer, without the need to initiate restructuring or bankruptcy proceedings. In the event of a trigger event in the form of a breach of the Solvency II capital requirements, the bonds are subject to

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mandatory conversion into issuer's shares (contingent conversion) or write-down of part or full of their nominal value (temporary/partial and full/permanent write-down). Moreover, these instruments are deeply subordinated[1], perpetual (although callable), with the possibility to skip the coupon payment and to reset the coupon.

At the same time, advanced work is under way in the European Union on a directive establishing a framework for the recovery and resolution of insurance and reinsurance undertakings, called the IRRD. This directive provides for the right of the resolution authority, already known in the case of resolution banks, to write down or convert capital instruments, including RT1 CoCos, which the resolution authority should apply in the event the institution "would cease to be viable", i.e. at the point referred to as "point of non-viability" (PONV). In this way, two frameworks overlap: the existing Solvency II, but only now completed in Poland due to the finalization of works enabling national undertakings to issue CoCos, with the upcoming IRRD framework. This article shows how these two frameworks overlap with each other when it comes to the instruments and principles of a going-concern loss absorption. In particular, we try to answer the crucial question which one out of both: Solvency II trigger-event or PONV power activates as first. The aim of the article is to determine the level of the undertaking's own funds equivalent to the reaching a PONV under the IRRD and to compare it with the level of own funds determining the occurrence of the event triggering the write-down/conversion into shares of RT1 CoCos on the basis of the Solvency II regulations (the so-called "contractual" level, because it must be disclosed in the terms and conditions of issue of the instrument). In particular, we want to determine, on the basis of the current Solvency II regulations and the draft IRRD, which loss absorption mechanism will be activated first: the contractual RT1 CoCos or the one in the form of a decision of the resolution authority, when the PONV is reached. We put forward the thesis that the contractual level of the trigger event is located above the PONV, because RT1 CoCos, according to the intention of Solvency II, is to be a "going-concern" instrument, i.e. enabling automatic recapitalization of the issuer, without the need for resolution authority intervention.

1. Research issues and literature review

The qualitative criterion of individual own funds' categories should be the ability to absorb losses incurred by the insurer both in the course of its activity and in the event of bankruptcy. In the first case, the absorption of losses is achieved primarily as a result of non-payment of dividends. In the case of hybrid bonds, the same absorption effect is achieved by cancelling the coupon payment (non-cumulative coupon deferral). Another loss absorption tool is the conversion of hybrid bonds into ordinary shares or partial (or even total) write-down of their nominal value.

[1] I.e. they are subordinated to all liabilities of the issuer – see point 3.1.1. describing the properties of RT1.

Such their feature is a prerequisite for qualifying eligible own funds to Tier 1. Also in the event of bankruptcy, ordinary shares show the greatest ability to absorb losses, since the claims of shareholders arising from the distribution of the assets of the liquidated company are satisfied only after the claims of all other creditors, including bondholders, have been satisfied. The same applies to subordinated bonds, which are satisfied only after all other liabilities have been paid back.

In the case of CoCos instruments, the key issue is to determine the type of event triggering the abovementioned loss absorption mechanism and to determine the appropriate minimum levels of regulatory capital of the issuer (a regulated entity – bank or insurer), marking the trigger event level (Jaworski and Liberadzki 2017). CoCos appeared first in the banking world in 2014 with an advent of the CRR (Capital Requirements Regulation)[2] adoption, which is – a banking-world analogue of the Regulation 2015/35[3]. According to Article 92 of CRR, credit institutions may use CoCos instruments to fill in Additional Tier 1 (AT1) capital. The equivalent of AT1 CoCos in the world of insurers' capital regulation are RT1 CoCos (Restricted Tier 1), which show many similarities to AT1s (Liberadzki and Liberadzki 2016a). Due to the fact that research on RT1 CoCos securities presented in the existing literature is limited, we undertook their analysis as one of the first authors (Liberadzki and Liberadzki 2016a; Liberadzki and Liberadzki 2019). The description of these instruments, as well as insurers' Tier 2 and Tier 3 bonds, presented in this article, further complement an important research gap. As for Poland, in 2016 we put forward the thesis that the then applicable national regulations contained the basis framework allowing the construction of CoCo bonds, at least as far as bank issuers are concerned (Liberadzki and Liberadzki 2016b).

In 2015, the BRRD (Banks' Recovery and Resolution Directive)[4] came into force, on which the IRRD draft is based to a very high extent (Dobrzańska 2022). IRRD is to do what the BRRD has done since 2015 in the banking world, namely to introduce a completely new post-crisis (we are talking about the financial crisis of 2007–09) framework for recovery and resolution. Among others the BRRD regime overlaps with CRR in a sense that the forced conversion or write-down of the bank's capital instruments, including AT1 CoCos, may take place regardless of the occurrence of the trigger event specified in the terms and conditions of issue of such an instrument (the so-called contractual trigger), but only on the basis of a decision of the resolution authority in the event the institution "is no longer viable", that is, at the point that is referred to as "point of non-viability" (PONV). Since such a decision of the resolution authority results from many conditions set out in the BRRD, the challenge is to determine the levels of bank's regulatory capital

[2] CRR – Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

[3] In principle, individual issues of CoCos by banks have taken place since 2009, but the emergence of a real market for these securities can be said from 2014 after the adoption of the CRR.

[4] Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms.

for which supervisory and resolution actions will take place. Due to the fact that the CRR/BRRD duality will soon be mirrored by the tandem: Solvency II/IRRD package, it is worth reaching for the research achievements in the field of banking sector experience in this area. The researches were aimed at determining the level of PONV, based on the numerous experience of banks resolution processes in the EU and on the basis of the regulations analysis (Jaworski et. al. 2019; Liberadzki and Liberadzki 2019) and attempts to presuppose a PONV on the basis of market price quotations and volatility of bank instruments subject to loss absorption (de Spiegeleer et al. 2017; Marquet 2017). It turns out that the level of bank's own funds initiating the contractual write-down/conversion of AT1 CoCos becomes of little practical importance, as it lies below the PONV (Jaworski et al. 2019; Liberadzki and Liberadzki 2019) and (de Spiegeleer et al. 2017). It can be argued that AT1 instruments will only be used in the event of a bank's financial distress instead of absorbing losses during normal functioning (Deutsche Bundesbank 2018). Moreover, in the resolution proceedings conducted so far, the administrative write-down or conversion of bank capital instruments spread over all components of banks' capital, including Tier 2 bonds senior to AT1 which puts in question their preference in hierarchy of loss absorption (Liberadzki and Liberadzki 2019). It also turns out that in the practice of previous bank resolution proceedings, the write-down and conversion of capital instruments' tool was not used separately, but was accompanied by the use of at least one of the resolution tools (Liberadzki and Liberadzki 2019; Kowalski 2018).

We transfer the above-outlined issues to the insurance sector, i.e. we examine how the contractual trigger of RT1 CoCos securities is shaped in relation to PONV on the basis of IRRD. In particular, we want to determine, on the basis of the applicable Solvency II regulations and the draft IRRD, which loss absorption mechanism will be launched first: contractual of RT1 CoCos (which would be desirable) or the one in the form of a decision of the resolution authority, when the PONV is reached.

The considerations presented in this publication are unique and, to the best of our knowledge, not yet taken up in the literature. Admittedly Dobrzańska (2022), in her article published in the journal "Bezpieczny Bank"[5], compares draft IRRD with BRRD in terms of objectives and conditions for resolution, its tools and financing, but the PONV analysis undertaken by us and the comparison of loss absorption mechanisms in Solvency II and IRRD should be treated as complementary, because it raises issues not raised in the aforementioned publication.

In the article, we work on the IRRD proposal of 22 September 2021 (COM(2021) 582 final 2021/0296(COD)).

[5] "Bezpieczny Bank" is an academic journal issued by the Polish resolution authority BFG (Bankowy Fundusz Gwarancyjny).

2. Capital structure of undertakings under Solvency II

The Solvency II Directive[6] (hereinafter: "the Directive") imposes an obligation on insurance and reinsurance undertakings to maintain adequate amounts of eligible basic and ancillary own funds divided into three tiers: Tier 1 (T1), Tier 2 (T2) and Tier 3 (T3). According to Article 93(1) of the Directive, classification "shall depend upon whether they are basic own fund or ancillary own fund items and the extent to which they possess the following characteristics: (i) permanent availability[7] and (ii) subordination"[8]. The main criteria for classifying own resources to the respective categories are not strict, as they depend on whether the quality characteristics are met "substantially" (Article 94(1) of the Directive).

Pursuant to Article 82 of Commission Delegated Regulation (EU) 2015/35[9] eligible amount of Tier 1 items must represent at least 50% of the SCR (Solvency Capital Requirements). Shares and reserves must form 80% of T1 own funds, which means that T1 hybrid instruments can fill no more than 20% of T1 own funds. Due to this "restriction", hybrid Tier 1 instruments are referred to as Restricted Tier 1 (RT1) to distinguish them from Unrestricted Tier 1 (UT1) items. If the insurer has issued hybrid bonds eligible for T1 in a greater volume, this excess is counted towards ancillary T2 items (Ancillary T2). The remaining 50% of the SCR may consist of eligible T2 and T3 instruments, with T3 eligible subordinated debt representing no more than 15% of the SCR.

In addition, European insurers are also required to hold capital to meet the Minimal Capital Requirements (MCR). Common shares and reserves must cover at least 80% of MCR. The remainder is to be covered by hybrid T1 instruments and T2 funds. However, it is not possible to cover the MCR using T3 instruments. The MCR is a threshold at which the local supervisor is required to intervene. According to the technical specifications of Solvency II, the MCR is essentially bounded between 25% and 45% of an insurer's SCR with the floor on absolute MCR level.

The amounts of eligible own funds of insurance and reinsurance undertakings in each category of own funds covering the capital requirements of SCR and MCR are shown in Figure 1.

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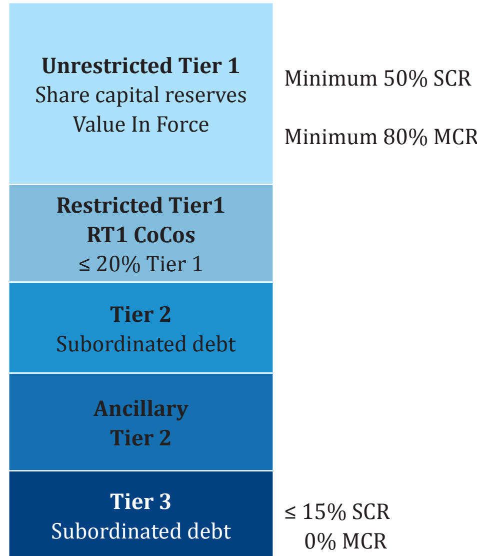
6 Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) as amended by Directive 2014/51/EU of the European Parliament and of the Council of 16 April 2014.

7 "Continued availability" means that a position is available or can be called upon to pay for in order to fully absorb losses in the event of going-concern and liquidation.

8 'Subordination' means that, in the event of liquidation, the total amount of the position may be used to absorb losses and the position is refused to be repaid to the holder until all other obligations, including insurance and reinsurance obligations, are met to policyholders and beneficiaries of insurance and reinsurance contracts.

9 Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance.

Figure 1. Coverage of SCR and MCR with eligible own funds



Source: Liberadzki and Liberadzki (2019).

The three capital tiers induce the three types of bonds: RT1s, T2 and T3 bonds, which will be presented in more detail in the following sections.

3. Loss absorption mechanism under Solvency II

3.1. RT1 CoCos Instruments (Restricted Tier 1 CoCos)

3.1.1. Contractual loss absorption mechanism

Article 82(3) of Regulation 2015/35 provides that up to 20% of the basic own funds, i.e. Tier 1, might be paid-in subordinated liabilities provided that they have all the features listed in Article 71 of Regulation 2015/35. Hybrid instruments that qualify for T1 must be fully available and paid-in, perpetual, subordinated to any liabilities of the issuer and free of any clauses providing incentives to redeem (particularly in form of coupon step-up mechanisms). Redemption or repayment is only allowed after five years at the earliest, and is subject to prior supervisory approval.

In addition, the item must provide for the suspension of repayment or redemption in the event of non-compliance with the SCR, or if repayment or redemption would lead to such non-compliance[10] On breach of the SCR, coupon cancellation is

[10] Article 71(1)(j) of Regulation 2015/35.

mandatory. Interest deferral is fully discretionary at all times to cancel distribution for an unlimited period and on a non-cumulative basis. Interest is payable only from distributable items which are essentially retained earnings. Dividend pusher and dividend stopper mechanisms are also not allowed, so the payment of dividends to shareholders (or lack thereof) does not entail any consequences in terms of coupon payment to holders of RT1 instruments.

Unlike with the banks' AT1 CoCos, there are no restrictions on the payment in the form of calculations of the maximum amounts to be distributed (the so-called MDA[11]).

3.1.2. Events triggering the activation of the loss absorption mechanism

The nominal amount or principal amount of a basic own fund item shall cover losses in the event of a trigger constituting a "significant non-compliance with the Solvency Capital Requirement" takes place. The loss-absorbing capacity resulting from the suspension or reduction of payments should not be deemed sufficient to be considered as the main loss absorption mechanism[12]. In the event of a trigger event in the form of a breach of Solvency II capital requirements, the bonds are subject to mandatory conversion into the issuer's shares (contingent conversion) or to full and permanent write-down or partial and temporary write-down of their nominal value. Thanks to this feature they are assigned to a new category of instruments, called contingent convertibles (CoCos).

When does the trigger event constitute a material non-compliance with the Solvency Capital Requirement? Pursuant to Article 71(p) of Regulation (EC) No 2015/35, non-compliance with the Solvency Capital Requirement (SCR) is considered significant if earlier of the following conditions is met:

– the amount of ownfund items eligible to cover the SCR is equal to or less than the 75% of the SCR,
– the amount of own fund items eligible to cover the Minimum Capital Requirement (MCR) is equal to or less than MCR,
– compliance with the SCR is not re-established within a period of three months of the date when non-compliance with the SCR was first observed. In practice, under RT1 issue conditions, the trigger event is assumed to occur when, within three months, own funds in relation to SCR are within the range (75; 100).

[11] Maximum Distributable Amount – the maximum amount that can be repaid to shareholders and holders of AT1 instruments in accordance with Article 141 of CRD IV, Directive (EU) No 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.

[12] Article 71(o) of Regulation 2015/35.

3.2. Tier 2 hybrid instruments

Bonds eligible for T2 must be subordinated to the issuer's other liabilities, including – which is particularly important – liabilities resulting from the insurance policies. Another consequence of this condition is the most important difference between T2 instruments and the T1 instruments described earlier: these bonds do not have to be perpetual, it is enough for their maturity to be "sufficient". This criterion is met when the maturity is sufficiently longer than the average maturity of liabilities arising from signed insurance or reinsurance contracts. The provision of Article 93(2) of the Directive applies in this case the concept of "relative duration". Such a factor also distinguishes these instruments from instruments classified as Tier 2 for the purposes of the CRR Regulation. However, the minimum maturity of hybrid bonds shall not be shorter than 10 years[13].

As in the case of T1 instruments, the call option may be exercised 5 years after the bond issue at the earliest and only upon consent of the supervisor. Such consent is also required for the early redemption of bonds, which is impossible in the event of a breach of Solvency II capital requirements. In other aspects, the requirements for T2 instruments are more liberal: moderate step-up (100 bp or 50% of T2s' initial credit spread) is allowed for T2 items, after ten years at the latest, and violation of capital requirements does not result in an automatic conversion or write-down of bonds. The requirements related to the payment of the coupon are also clearly more advantageous for investors: the issuer has no longer the absolute discretionary right to cancel the coupon payment, which can only be constructed as a cash-cumulative deferral. Moreover, it is possible to introduce dividend pusher and dividend stopper mechanisms, what increases the attractiveness of the instrument to the investors. The item must provide for the suspension of repayment or redemption in the event of non-compliance with the SCR or if repayment or redemption would lead to such non-compliance. Deferred coupons are settled on a cumulative basis which helps to soften the impact (Liberadzki and Liberadzki 2019). This is not the case with bank Tier 2 where the coupons cannot generally be deferred except upon default.

As indicated in point 2, T2 can also be covered by excess hybrid bonds eligible for T1. These instruments are then treated as Ancillary Tier 2 own funds[14].

3.3. Tier 3 hybrid instruments

Unlike the CRR Regulation, Solvency II introduces Tier 3 positions that can fill up to 15% of the undertaking's SCR, but T2 and T3 together cannot exceed 50% of the undertaking's SCR (see Figure 1). T3 own funds may consist of other financial

[13] Article 73(4) of Regulation 2015/35.

[14] Such ancillary items may also consist of the abovementioned supplementary benefits from members of the mutual society, letters of credit and guarantees, provided that they are loss-absorbing.

instruments, i.e. those that do not fall under T1 or T2[15]. They can rank pari passu with Tier 2 or be senior to Tier 2. The maturity of such instruments may not be shorter than 5 years, and early redemption by the issuer is possible only after obtaining the consent of the supervisor. In addition, if the issuer breaches the MCR (and not – as in the case of T2 instruments – SCR), the forced delay in the payment of the coupon should be applied.

As opposed to Solvency II, CRR does not provide for Tier 3 instruments. To some extent Tier 3 bonds can be compared to senior non-preferred bank bonds, which are a "product" of the BRRD.

4. Loss absorption mechanism in IRRD

4.1. Write-down or conversion of relevant capital instruments

T1 instruments (both unrestricted and restricted) are intended to cover the company's losses on a "going-concern" basis, i.e. before liquidation or resolution, enabling the insurer to continue its activities[16]. The T2 and T3 instruments, which do not have a conditional write- down/conversion mechanism and (in principle) coupon deferral, are used to absorb losses on a "gone-concern" basis, i.e. after the initiating bankruptcy or resolution proceedings.

Instruments T1, T2 and T3 in the IRRD framework form category of "relevant equity instruments"[17], which should "fully" absorb losses until those instruments are entirely written down or converted into T1 instruments "at the point of non-viability and before any resolution action is taken" (recital 51 of the IRRD preamble), and thus absorb the issuer's losses on a going-concern basis. It is at this point that two frameworks converge: Solvency II and IRRD, interacting with each other. Thus, with regard to RT1 instruments, the automatic (so-called "contractual" – because it is shaped by the issue terms and conditions) recapitalisation provided for in Regulation 2015/35 is replaced in the IRRD by a decision of the resolution authority, which in its action is by no means bound by the contractual loss absorbing provisions. It may happen that RT1 security with a contractual mechanism for the shares' conversion is written down by decision of the resolution authority or vice versa. The PONV should be understood as the moment when the resolution authority determines that the insurance or reinsurance undertaking meets the conditions for triggering the resolution procedure or the moment when the resolution authority decides that the undertaking 'would cease to be viable', if those capital instruments were not written down or converted[18].

[15] Article 94(3) of Directive 2009/138/EC.
[16] Cf. recital 29 of Regulation 2015/35.
[17] Article 2(55) IRRD.
[18] See recital 51 of the IRRD.

Article 19 of the IRRD provides for the triggering of a resolution procedure if all three conditions are met:

a) the supervisory or resolution authority has determined that the insurance or reinsurance undertaking is failing or likely to fail (FOLTF);
b) there is no reasonable prospect that any alternative private sector or supervisory action, including preventive and corrective measures, could prevent the failure of the undertaking within a reasonable time;
c) resolution action is necessary in the public interest.

The draft IRRD clarifies the first condition for triggering the resolution, indicating four situations in which an insurer may be considered FOLTF:

a) the undertaking breaches or is likely to breach the MCR and there is no reasonable prospect of restoring the compliance;
b) the insurance or reinsurance undertaking no longer fulfils the conditions for authorisation or fails seriously in its obligations under the laws and regulations to which it is subject, or there are objective elements to support that the undertaking will, in the near future, seriously fail its obligations in a way that would justify the withdrawal of the authorisation;
c) the undertaking is unable to pay its debts or other obligations, including payments to policyholders or beneficiaries, as they fall due, or there are objective elements to support a determination that the undertaking will, in the near future, be in such a situation;
d) extraordinary public financial support is required.

The reading of IRRD preamble recital 51 is reinforced by the IRRD Article 26(2), which provides that if resolution would result in losses being borne by creditors, in particular policyholders, or would result in the restructuring or conversion of their claims, the resolution authority shall exercise the power to write down or convert capital instruments and eligible liabilities immediately before or together with the application of the resolution tool. This wording indicates that the power to write down or convert capital instruments and eligible liabilities referred to in Article 26(2) of the IRRD is outside the list of resolution instruments in Article 26(3) of the IRRD, and the use of the word "immediately" implies that it is the last tool to be used before resolution, i.e. applied after the recovery tools have been exhausted.

Another interesting issue is that Article 26(2) actually goes beyond recital 51 of the preamble and includes "eligible liabilities" as well, i.e. those that would be eligible for the bail-in tool[19] – one of the resolution instruments. However, unlike the MREL requirement[20] of BRRD, the draft IRRD does not introduce a minimum requirement for relative value of instruments on the balance sheet of issuers, which would constitute a kind of protective buffer primarily in favor of policyholders, just as MREL protects deposit holders.

[19] Pursuant to Article 34(5) and (6) of the IRRD.

[20] Minimum Requirements for Own Funds and Eligible Liabilities within the meaning of Article 45 of the BRRD.

Given the fact that the IRRD highly takes pattern on BRRD, especially since recital 51 of the IRRD preamble is essentially reproduced from recital 81 of the BRRD preamble, it can be assumed that the write-down or conversion of capital instruments takes place if the institution meets the conditions for initiating a resolution that would include a write-down or conversion tool (Article 26(3)(e)), without the need for fulfilling a public interest criterion (Schillig 2016). Interestingly, Article 26(2) of the IRRD does not derive the term "non-viability" from recital 51 of the preamble as a condition for taking such action, but uses the phrase "the resolution authority decides to apply the resolution tool to an insurance or reinsurance undertaking". Such wording means that the conditions for triggering a resolution are met, i.e. an insurer would cease to be viable[21].

4.2. Parameterization of PONV

Actually, resolution covers two areas: (i) restructuring and (ii) orderly liquidation. The IRRD, similarly to the resolution system of banks, emphasizes the pre-emptive and preventive function of forced restructuring, so as to manage the deterioration of the financial situation of companies in a timely manner and prevent their bankruptcy. Only if failure is inevitable will orderly resolution measures minimise the negative repercussions by preserving the continuity of critical functions, understood primarily in terms of preserving insurance and reinsurance protection and preserving financial stability[22].

Undoubtedly, the write-down or conversion of UT1, RT1, T2 and T3 is part of preventive measures in the context of a forced restructuring, hence the importance of the resolution authority to take appropriate action in a timely manner before the undertaking becomes insolvent in terms of balance sheet or cash flow, all equity has been fully wiped out or is unable to meet its payment obligations as they fall due[23]. It becomes crucial to capture the moment when the insurer is "failing or likely to fail", i.e. before the conditions for bankruptcy are met. As mentioned in 4.1., Article 19 of the IRRD parameterizes that threshold in the form of a breach of the MCR or the likelihood of its breach. This would indicate that the PONV level is set by or is just above the MCR (the aforementioned pre-emptive actions in the preventive function).

However, in our opinion, the PONV level may be placed much higher. First of all, the IRRD introduces "pre-emptive recovery plans", but does not parameterize (so far) eligible own funds amount triggering activation of such a plan. Recital 18 in the preamble to the IRRD merely states that undertakings "should therefore identify a set of quantitative and qualitative indicators that would trigger the activation of remedial actions envisaged in such pre-emptive recovery plans. Such indicators

[21] Cf. recital 51 IRRD preamble.

[22] Cf. recitals 2–4 of the IRRD preamble.

[23] Cf. recital 28 of the IRRD preamble.

should help insurance and reinsurance undertakings to take remedial actions in the best interest of their policy holders and should not lay down new regulatory prudential requirements". Therefore, the threshold for triggering pre-emptive recovery plans should not lie above the SCR plus the supervisory add-on referred to in Article 38 of the Directive. Interestingly, the IRRD provides that pre-emptive recovery plans will be "without prejudice to the development and submission of a realistic recovery plan as required by Article 138(2) of the Directive".

Pursuant to Article 138(1) of the Directive, undertakings shall inform the supervisory authority immediately if they find that they do not comply with the SCR or if there is a risk of such non-compliance within the next three months[24]. Within two months from the alleged non-compliance with the SCR, the undertaking submits a "realistic recovery plan" for supervisory approval (Article 138(2) of the Directive). In general, the Directive sets a six-month timeframe from the determination of non-compliance with the SCR to the restoration of the level of eligible own funds covering the SCR or the reduction of the risk profile in order to ensure compliance with the Solvency Capital Requirement[25]. The supervisor may, in "justified" cases, extend this six-month period to 9 months. As the capital situation continues to deteriorate (does not improve), the Solvency II package provides for an escalation of supervisory measures, which should be exhausted within 6 (9) months, including: restriction or prohibition of disposal of the indicated company's assets, appointment of a curator (trustee), receivership. The undertaking shall also take steps to restore capital adequacy, including convening a general meeting to adopt a resolution on the coverage of loss and its implementation. Failure to implement the recovery plan on time and failure to restore compliance with the SCR despite the exhaustion of supervisory measures and actions taken by the undertaking, shall result in compulsory liquidation[26].

Deterioration of an undertaking's financial situation may lead to a breach of the MCR. Pursuant to Article 139(1) of the Directive, the undertaking shall immediately inform the supervisory authority about the non-compliance or the risk of non-compliance within the following three months. Within one month of the identification of non-compliance with the MCR, the undertaking shall submit for approval by the supervisory authority a short-term realistic financial plan aimed at restoring – within three months of that determination – the eligible basic own funds at least to the level of the MCR or reducing the risk profile in order to ensure compliance with the MCR (Article 139(2) of the Directive). If the supervisory authority considers the financial plan submitted to be "manifestly inadequate" or the undertaking concerned fails to implement the approved plan within the prescribed period, the authorization is withdrawn (Article 144(1) of the Directive) which ends in winding-up proceedings (Article 279 et seq. of the Directive).

[24] Companies are required to determine the solvency ratios SCR and MCR.

[25] Cf. Article 138(3) of the Directive.

[26] Cf. art. 322 of the Polish "Act of 11 September 2015 on insurance and reinsurance activity" (Official Journal 2019, item 381).

Summing up the considerations presented so far and returning to the conditions for resolution stipulated in Article 19 of the IRRD, the activation of the T1, T2 and T3 write-down or conversion tool should take place in a situation where, despite the implementation of supervisory actions and "private sector measures", there is no prospect of avoiding the failure of the undertaking within a "reasonable time". In other words, after a fruitless recovery phase, the relevant capital instruments should be written down or converted, based on the conditions for triggering resolution (excluding the public interest premise), but before resolution action is taken. In consequence, PONV lies above MCR. The exact relation to SCR will be presented in the next section.

5. "Going-concern" loss absorption mechanism in Solvency II and IRRD – comparison

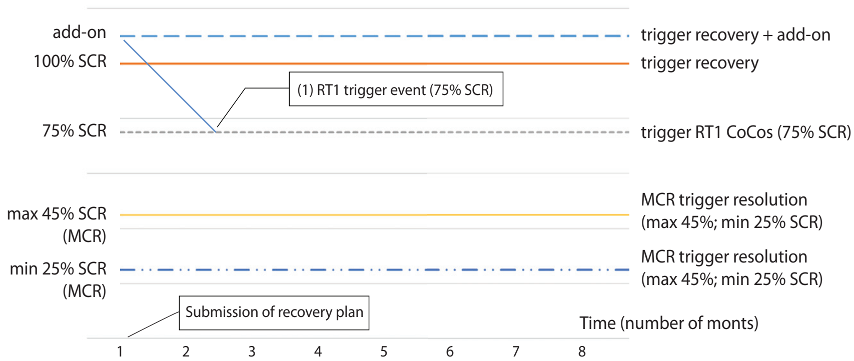
As already mentioned above, the loss absorption by RT1 CoCos on an ongoing basis, i.e. before the initiation of resolution or liquidation, is an area regulated by both Solvency II and IRRD. In this section, we will examine whether such and no other level of designation of the event triggering the forced conversion/write-down of RT1 CoCos, makes them "going-concern" instruments, i.e. enabling automatic recapitalization of the issuer, without the intervention of the resolution authority, which is the desired and consistent with the intentions of Solvency II[27].

In the figures below, we examine the order of occurrence of trigger events in the situation of not meeting the level (figuratively we call it "hitting the bar" top to bottom) of SCR or SCR plus the capital add-on set by the supervisor in the „exceptional circumstances" referred to in Article 38 of the Directive (Figures 2 and 3) and in the option of hitting the MCR bar (Fig. 4). In the first scenario, illustrated in Figure 2, a decrease in eligible own funds to 75% SCR or less (but above the MCR) means the occurrence of a trigger event initiating the conditional write-down or conversion of RT1 CoCos based on the terms and conditions of issue. In such a situation, regardless of the notification of the recovery plan and the application of the pre-emptive recovery plans provided for in the IRRD, RT1 CoCos are written down in whole or in part or converted into shares, or repayment is suspended or no redemption is required (cf. point 3.1.1.). If there is a compulsory write-down, the paradox of "reverse subordination", already described in the case of AT1 CoCos of bank issuers (Liberadzki and Liberadzki 2019), occurs, consisting in the fact that the holders of RT1 CoCos, who nominally have priority in the hierarchy of claims over shareholders, will be the first to incur a loss, and the situation of shareholders will even improve (because the undertaking's liabilities will be written down)[28]. In conclusion, in the first option RT1 CoCo works well in the function of absorbing "going-concern" losses.

[27] Cf. points 2, 3.1 and 4.1.

[28] This paradox became apparent at the instance of write-down of Credit Suisse's AT1 CoCos on March 19, 2023, which was neither preceded nor followed by a redemption of shares.

Figure 2. Option 1. RT1 trigger event: eligible own funds less than or equal to 75% of the SCR



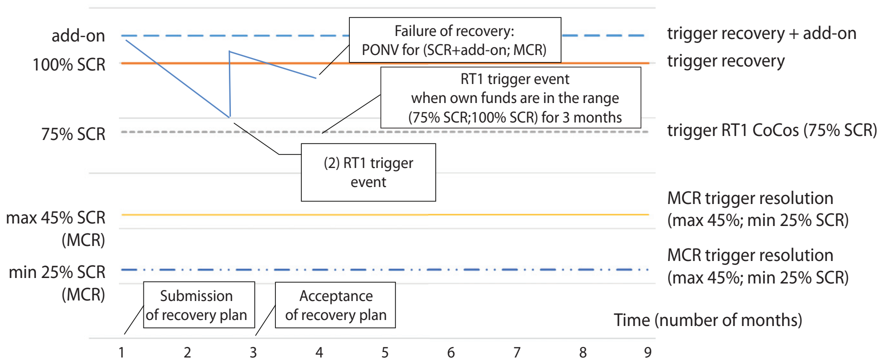
Source: own elaboration

In the second option, SCR falls, but there is no violation of the 75% SCR bar (Fig. 3). If compliance with the SCR is not restored within three months of the first determination of the non-compliance with the Solvency Capital Requirement, the trigger event initiating the conversion/write-down of RT1 CoCo also occurs (cf. 3.1.2). The three-month period shall also set a conventional timeframe for supervisory approval or refusal of an entity's recovery plan. In our opinion, it cannot be assumed that by that time the resolution authority will decide on the conversion/write-down of RT1 without waiting for the recovery measures to be exhausted. Thus, in this option, the contractual trigger event will activate before the PONV is reached. We assume that only after six months (or in special cases – nine) of continuing deterioration of the capital situation despite measures and actions taken by the supervisor and the entity, the resolution authority will "pull the trigger" and order the write-down of UT1 instruments, then the write-down or conversion of RT1, T2 and T3 instruments into UT1 components, until the loss is fully covered. In this option, the PONV contains within an open interval (MCR; SCR + add-on).

In option 3, own funds fall below the MCR. Again, this means activating the RT1 CoCos contractual bar. On the basis of the provisions of the Directive, the MCR may not be lower than 25% of the SCR and may not exceed 45% of the SCR, with a minimum amount threshold of the MCR. Option 3 is illustrated in Fig. 4.

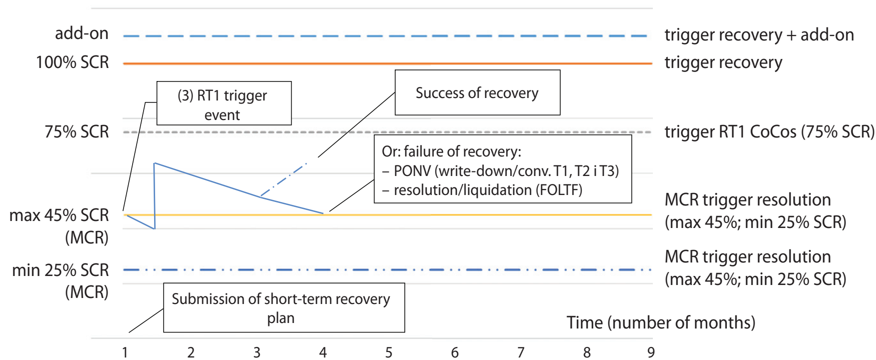
In this case, RT1 instruments also absorb the loss first, on a going-concern basis. If the write-down/conversion, skipping coupon payment or redemption of the instrument do not raise own funds above the level of MCR and the short-term financial plan does not enable a bounce-back within three months from the determination of the infringement, then an undertaking reaches the PONV. If, despite the write-down of UT1 instruments, then write-down or conversion to T1 of T2 and T3 instruments, the capital situation still does not improve, then the resolution or liquidation of the entity remain a solution of the last resort.

Figure 3. Option 2. RT1 trigger event: three months of non-compliance with SCR. Own funds within the range (75% SCR; 100% SCR)



Source: own elaboration.

Figure 4. Option 3. RT1 trigger event: eligible own funds less than or equal to 75% of the SCR



Source: own elaboration.

6. Summary

AT1 and RT1 CoCos are very similar. They have identical features, such as: (i) perpetuity, (ii) minimum ("synthetic") maturity of 5 years, (iii) prohibition of step-up and dividend pusher/stopper clauses, and above all (iv) conversion into shares or write-down of nominal value, as the main mechanism for absorbing losses. For insurers, the event initiating such a write-down/conversion is set at 75% SCR, 100% MCR or not meeting the SCR for three months.

The loss absorption and recapitalization included in the draft IRRD are based on BRRD. Hence, when examining the characteristics of RT1 hybrid instruments in the going-concern loss-absorption function and determining the PONV of undertakings,

one can refer to a large extent to the experiences of the banking sector, which has already numerous resolution processes on the record. In our opinion, RT1 CoCos have better parameterization than their banking counterparts, at least from the point of view of contractual going-concern loss absorption capacity, i.e. before reaching PONV and even more so before entering the resolution path. AT1 CoCos lack such a clearance – in no single case in Europe was the resolution preceded by the activation of the CRR-based contractual loss absorption provisions of AT1s. The write-down/conversion of bank capital instruments covered all CET1[29], AT1 and T2 items and every time resolution authorities combined it with at least one of the resolution tools. Of course, the above statements do not pursue to be a comprehensive assessment of the quality of RT1 hybrid parameters and their ability to absorb losses, such requires more in-depth studies taking into account the specificity of insurers, the quality and thickness of their regulatory capital layers and volatility. The practical application of IRRD has to be awaited, but the probability of a trigger event initiating the write-down/conversion of RT1 CoCos has been quite low so far due to high levels of SCR and MCR reported by insurers.

Similarly, Tier 2 bonds of banks and insurers present similar characteristics: mandatory coupon payments, a five-year minimum period for early redemption by the issuer and subordination to senior debt, although there are also differences consisting in the admission of coupon step-up for insurers. Interestingly, the T2 and T3 instruments, which under Solvency II absorb a loss on the gone-concern basis, i.e. on the basis of subordination in the hierarchy of creditors' claims in the event of bankruptcy/resolution to superior claims, acquire under the IRRD the characteristics of going-concern instruments, provided that their write-down/conversion takes place before the resolution is initiated if not prevents it.

Insurers' T3 lack their bank equivalent, if we limit ourselves to capital adequacy standards. Taking a broader view though, the existence of this extra regulatory capital layer to some extent makes up for the absence of minimum requirement for own funds and eligible liabilities in the IRRD proposal, an equivalent of MREL in BRRD. Loss absorbing T3 can protect unsecured creditors (including the most important of them – policyholders) like bank non-preferred senior bonds do. These so-called 'sub-seniors' count towards MREL but unlike T3 they lack eligibility for banks' own funds purposes.

[29] Common Equity Tier 1 instruments, CET1 – cf. Article 28(1)–(4), Article 29(1)–(5) or Article 31(1) of the CRR Regulation.

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