

Ethical Benefits and Challenges in Insurance: Framework of Introducing Pillar IV Regulation to Solvency II

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ABSTRACT:

The paper delves into the concept of Pillar IV, which addresses the recovery, resolution, and orderly exit from the insurance market within the framework of Solvency II - an essential tool for insurers' supervision. While Solvency II has undoubtedly reduced the risk of insolvency for insurers, it hasn't eliminated it. Therefore, this research aims to conduct a comparative analysis of various market models and proposals from authorities to come up with the best possible solutions for recovery stages, mechanisms to be implemented in the case of economic non-viability of the insurer, and resolution mechanisms to ensure a seamless exit from insolvency. The article evaluates different resolution methods, weighing their benefits and challenges, considering the interests of consumers, and the roles of regulatory and resolution authorities. The authors suggest a set of best practices, solutions, and guidelines to implement a resolution through regulations, which can be used to establish Pillar IV and enhance the level of preparedness of insurers. The goal is to avoid the adverse systemic effects of a traditional bankruptcy, which could significantly impact consumers, the economy, and public funds.

Keywords: Solvency II; Resolution; Insurance; Recovery; Bail-in

1. Introduction

The concept of resolution is taken from the banking field, where financial and banking authorities intervene to manage crisis situations and prevent the collapse of a financial institution (Bolton & Oehmke, 2019). The insurance resolution is a recent adaptation developed by the Financial Stability Board (FSB, 2014), where the terms are refined, and the approach is more clearly subject-oriented but with slow implementation globally.

A study conducted by the European Insurance and Occupation Pensions Authority (EIOPA, 2017) outlines the resolution's goals and proposes aligning member

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states' laws. The study aims to harmonize recovery and resolution processes for insurers and reinsurers, with an additional focus on protecting insurance creditors and ensuring the overall financial stability of the system.

According to the International Association of Insurance Supervisors (IAIS, [2021](#)), at the international level, the resolution in insurance represents that stage in which an insurer is after the actions to prevent the deterioration of the financial and prudential status have been unsuccessfully exhausted, or the recovery actions, the resolution appearing at the point where the insurer is no longer viable, turning from solvent to financially insolvent, or when for the next period there are reasonable indications that it will no longer be viable. When falling within this definition, the resolution authorities are the national financial supervisory authorities that also hold this role or independent authorities according to each country's legislation. They intervene and provide support to reduce consumer impact, acting as a safety net.

At the European level, the European Commission ([2021](#)) developed a draft directive specific to Insurance Recovery and Resolution (IRRD), which aims to clarify and standardize the concept and application of the resolution for member countries. Through this proposal for a directive, an insurance or reinsurance undertaking should be subject to the resolution procedure when it is in difficulty, or likely to be in difficulty, and when there is no prospect that the difficulty can be avoided by private sector alternatives or by surveillance measures. It is important to mention that any measures taken to address potential violations of privacy or rights are only implemented when deemed necessary and in the public best interest.

To achieve minimal harmonization of legislation, it is crucial to establish clear definitions, objectives, and resolution principles. To accomplish this, insurers should focus on the fourth pillar proposed by our article's authors, which involves planning and preparing resolution plans. In the first stage, insurers should fulfil and develop their resolution plans, including the involvement of resolution authorities. In the second stage, early intervention is necessary to prevent financial problems from escalating. The third stage, which requires regulation, is the resolution process itself. During this stage, clear objectives and managed attributions must be defined to protect insurance creditors and ensure the continuity of policies and their payments. Finally, the fourth stage is crucial in supporting the fourth pillar by establishing a cooperation framework at an international level. The resolution must be an integral part of the general international supervisory framework, where it exists regulated, being managed by the national supervisory authority, with the final role of the best possible protection of insurance creditors, but also having a broader role on all beneficiaries and to the third parties involved, on the economy and economic actors, protecting those most exposed to the most undesirable scenario in which an insurer can end up.

At the European Union level, several countries (France, Romania, Holland, Spain) are at the top of the list promoting the concept of resolution in insurance, which seeks to eliminate the particularly serious effects at the level of consumers of financial services, both individuals and companies, of the insolvency and bankruptcy of insurers (Matis, [2021](#); Stef & Bissieux, [2022](#); Siri & Van den Hurk, [2022](#)).

From a prudential standpoint, insurers are subject to regulation under the Solvency II Directive, a European framework that applies to all insurers and reinsurers

within the EU (2009). This framework aims to ensure that insurers and reinsurers maintain sufficient funds to cover the risks they assume while also having appropriate governance and reporting systems in place to protect consumers. The solvency capital requirement is the foundation for assessing the adequacy of quantitative requirements in the insurance sector, along with the Solvency Capital Ratio thresholds (Yenni, Arifin, Gunawan, Pakpahan, & Siregar, 2021) and the Minimum Capital Ratio (Rahadian & Permanent, 2021).

By applying the provisions of Solvency II, the aim was to reduce the probability of getting into difficulty and to improve the EU resilience of the insurance sector, with this aim to be strengthened in the next step by revising the regulatory framework through harmonized procedures at the European level for the resolution of insurers (Reumers & Nelemans, 2022). Despite a more solid and robust prudential framework established by Solvency II, situations of financial difficulty could not be completely excluded; in fact, they are happening. Therefore, a regime providing a credible set of resolution tools to the authorities was considered necessary at the EU level, so that the authorities can intervene sufficiently early and quickly if insurers are in trouble or likely to fail, to get into difficulty and thereby supporting the public interest, regardless of whether we are talking about benefits for the insured persons or for the stability of the entire financial system, of the economy as a whole and implicitly of the citizens.

In structure, Solvency II includes three pillars. The first pillar deals with quantitative financial requirements such as capital and reserves. The second pillar deals with the qualitative requirements of governance and risk management. The third pillar deals with public information communication through reports and statements. In accordance with the purpose of this research, the fourth pillar, which the authors propose for inclusion, is related to the resolution applied in insurance.

The present research paper is organized into distinct sections. Section 2 (Literature Review) presents a comprehensive review of relevant research in the field, whereas Section 3 (Research Methodology) provides a detailed account of the study's scope, research methodology, objectives, and hypotheses. Section 4 presents the outcomes of the qualitative analyses, while Section 5 delves into the discussion of those results and their relation to the three research objectives mentioned earlier. Finally, Section 6 concludes the paper by summarizing the key findings and offering suggestions for future research.

2. Literature Review

The field of resolution in insurance is a subject of specialized analysis in finance and economics, and the documents issued by the specialized authorities are the basis of the specialized works that address this topic.

In a framework analysis of the IAIS activity (Table1) it is found that the institution issued a series of specific documents in which it developed different principles related to Recovery and Resolution (R&R).

Table 1: Documents proposed by IAIS relevant to recovery, resolution, or orderly exit from the insurance market

Code	Title	Area	Specificity
Insurance Core Principle (ICP) 12	Exit from the Market and Resolution	It develops principles related to the resolution framework. Covers voluntary exit and resolution when insurers are no longer viable and without recovery, resolution leading to the liquidation of the insurer.	Resolution principles are from the perspective of exiting the respective insurer from the market in an orderly manner, protecting consumers and absorbing losses while respecting the hierarchy of creditors. The supervisor analyses risk and operational scenarios and establishes resolution procedures, with a focus on international groups and communication.
Insurance Core Principle (ICP) 25	Supervisory Cooperation and Coordination	It refers to the cooperation and coordination of the authorities involved in cross-border surveillance, establishing responsibilities.	Supporting international coordination, including in the case of the resolution for the application of ICP 12, oversight of crisis management plans, cooperation during crisis.
Insurance Core Principle (ICP) 16	Enterprise Risk Management for Solvency Purposes	It sets out the requirements for insurers to include the Solvency II framework in the company-wide risk management system for the identification, measurement, reporting, and management of the insurer's risks from one end to the other.	It links R&R and risk management at company level (identification, quantitative measurement, establishing risk appetite, management of assets, liabilities, investments, liquidity, etc.), with ORSA and R&R planning.
Insurance Core Principle (ICP) 23	Group Wide supervisor	It provides for the responsibilities of insurance group supervisors, the coordination of national supervisors, the identification of groups and the setting of the objectives of group supervision.	It also covers the recovery approach for insurance groups with an international presence (minimum three jurisdictions, premiums outside the parent country exceed 10%), and size (assets over USD 50 billion, gross premiums over USD 10 billion).
Application Paper, 2019	IAIS Application Paper on Recovery Planning	Application document to plan the recovery of insurers. Covers recovery objectives and concepts, recovery plan requirements, governance, key elements, role of supervisor.	Provides guidance on compliance with the supervisory ICP principles for resolution planning, in particular ICP 16, ICP 23 and ICP 25, and FSB requirements related to key attributes of effective resolution.
Application Paper, 2021	Draft Application Paper on Resolution Powers and Planning	Document on supervisory practices, powers, and resolution mechanisms linked to ICP 12.	It sustains ICP 12 and ICP 25 principles. It groups the powers into taking control of the insurer, banning certain payments and transfers, withdrawing the license for new transfers and going into run-off, restructuring mechanisms, suspension of rights, liquidation.

Source: Author's own processing

Thus, the work of IAIS focuses on developing standards and guidelines for insurance supervision worldwide, facilitating cooperation between supervisory authorities in different countries. Through the exchange of information and constant dialogue between members, the IAIS thus contributes to adapting to market developments and addressing complex challenges such as solvency regulation. In this sense, Own Risk and Solvency Assessment (ORSA) is an ongoing and self-directed process undertaken by insurers and insurance groups to assess the adequacy of their risk management and solvency conditions under normal and severe stress scenarios, with R&R planning.

Since 2013, the IAIS has stipulated that insurance schemes and guarantee funds must include R&R with relevant functionality to ensure effective insolvency management (IAIS, 2013). These functions include continuing to support the operation of an insurer, providing financial support to insolvent insurers, entities interested in acquiring an insolvent insurer, or those to whom the portfolio is transferred. R&R schemes also facilitate the portfolio transfer process and assist in determining the necessary actions for a bridge entity if a buyer is not immediately found for the insolvent insurer. Thus, these principles contribute to strengthening the stability of the insurance sector and protecting the interests of the parties involved in the context of delicate financial situations.

Regarding insurance regulation at the European level, some studies mention that Solvency II does not have orderly provisions regarding R&R, compared to the banking sector (Siri & Van den Hurk, 2022). The structured approach to R&R, including its preparation, especially through ex-ante planning, requires stakeholders to focus on the possible negative consequences, including the possible inability to recover and exit the market without a significant negative impact (Annoscia & Martinez, 2023). The goal of regulation and supervision is to avoid the collapse of financial and insurance establishments. However, traditional measures are not entirely effective in preventing all issues within these institutions. Some studies suggest that added caution can increase expenses and result in higher prices for financial products like insurance. This perspective, which considers the profitability of insurers, has slowed the implementation of the new European directive (Van Hulle, 2019).

Regarding the standardization of resolution models, a discussion is necessary to highlight the particularities of the identified main models. In 2016, three European countries introduced a detailed framework, but in different forms of recovery and resolution regulation: France, the Netherlands, and Romania (Colomer, González Losantos, López Pérez, & Mohedano Gómez, 2021; Vikelidou & Tagkalakis, 2023).

The resolution model implemented in France incorporates crucial components such as proactive recovery and resolution planning for select insurance companies. It also emphasizes the enhanced capabilities in resolution, particularly the capacity to transfer insurance portfolios and establish an intermediate entity (EIOPA, 2020). In accordance with this model, the French authority can decrease life insurance liabilities prior to performing the portfolio transfer, if required to facilitate the process. Unlike the previous model, the new framework introduces practical approaches for implementing resolution, which concentrated primarily on judicial winding-up procedures.

The Dutch resolution model and related legal provisions were analysed based on a 2022 research highlighting the principles by which the Dutch Resolution Authority develops resolution plans for insurers, reinsurers, or groups to which the resolution tool

could apply in case of getting into difficulty or insolvency (Van den Hurk, 2022). One of the relevant points determines whether the NCWOL principle ("No Creditor Worse Off than in Liquidation") could have been violated in the resolution and whether there is room to manoeuvre to apply the internal recapitalization in the case of the rights of creditors and insurance policyholders (Vikelidou & Tagkalakis, 2023).

For the resolution model in Romania, discussions began in 2014, so the model was later substantiated and implemented through an Insured Guarantee Fund (Mozhi & Nedelea, 2017). Thus, the Financial Supervisory Authority can intervene actively through measures to reduce the insurer's risk profile, apply recapitalization measures, and review its strategy and structure, followed by early intervention measures. The measures that can be adopted in the framework of the resolution procedure and the applicable resolution tools must meet the objectives of the resolution, namely: protecting insurance creditors, minimizing the impact on protection funds, avoiding significant negative effects on the financial stability of the insurance market, maintaining the critical functions (Aida, 2022).

Insurance failures' economic and social impact is significant, affecting millions of people and tens of thousands of companies. A concrete case can be considered the bankruptcy of City Insurance in Romania, in which more than 2 million policyholders were affected, with a cross-border impact (Sirbulescu, Pîrvulescu, Chirilă, & Chirilă, 2023). EIOPA (2020) summarizes the Romanian model, introduced in 2015, as a response to the unfavourable developments in the insurance market in Romania since 2014 and as a framework for R&R preparation, measures to prevent and to apply resolution mechanisms.

The specialized events organized annually bring new perspectives and synthesize the concepts associated with resolution in the insurance sector (Campbell & Bonhomme, 2022). From a cash flow perspective, there is a significant discrepancy between insurance and banking resolution. The diversity of funding sources, the varied models of insurance schemes, and the different mix of funds, whether public or private, including private industry funds, with ex-ante or ex-post approaches, reflect the specifics of the local market. Funding mechanisms from the insurance industry generate a common interest in the solvency of all parties involved. It is crucial to distinguish between resolution and going concern, which is essential for long-term insurance policies, and resolution versus liquidation with compensation, which should be acceptable for short-term insurance contracts.

Siri and Van den Hurk (2022) mention that the new R&R framework can be considered as a new pillar, the fourth pillar, in addition to the three already provided for by the Solvency II Directive, with all the related measures for the prevention, preparation and enforcement of the various resolution mechanisms. The European approach to resolution in insurance must be the fourth pillar of the supervisory and intervention levers at the European level, and this approach is supported and documented by the authors of this research.

3. Research Methodology

The authors conduct a comparative analysis of proposed resolution methods from various national authorities to provide clear and concise solutions for economic recovery

in cases of insurer insolvency while also avoiding the negative impacts of traditional bankruptcy. This approach prioritizes important factors such as consumer interests, regulatory and resolution authority roles, and the implementation of effective methods that can positively impact the economy.

The legislation relating to the regulation of the insurance market, the solvency of insurers, and the protection of consumers is based on rules that can briefly cover, without limitation, the aspects highlighted in Table 2.

Table 2: Legislative aspects covered by the rules related to the resolution

Topic	Detailing
Supervision and reporting	Rules relating to supervision and reporting may include requirements for periodic reporting of financial data, monitoring, and risk assessment by the regulatory body, and verification of compliance with applicable rules and regulations.
Funding and Capitalization	These rules relate to the level of capitalization and solvency required for insurers to meet risks and meet their obligations to their customers. These may include minimum capital requirements, capital-to-risk ratios, and stress tests.
Resolution procedures and plans	These are the procedures and action plans established by the regulator to manage a situation where an insurer can no longer meet its financial obligations. These may include recovery plans, restructuring processes, takeovers, or liquidation.
Resolution mechanisms	Regulations for the application of resolution mechanisms, such as bridge entity, sale of portfolio and activity, reduction of assets, bail-in, etc.
Consumer's protection	Consumer protection rules set out the rights and protections for customers of the insurer in difficulty. These may include certain payments to insurance creditors by schemes guaranteeing policyholders in situations of insolvency/bankruptcy, with the transfer of policies to another insurer or the provision of clear and accurate information about the insurer's situation. According to the European provisions, the resources of the guarantee funds cannot be granted to an insurer to solve financial problem.
International coordination and cooperation	Where an insurer has cross-border operations, the rules may include requirements for coordination and cooperation between regulatory bodies in different jurisdictions to manage a potential crisis.

Source: Author's own processing

These considerations are also reflected in the EIOPA recommendations (2017), which aim to establish a minimum level of harmonization at the level of the European Union, to ensure financial stability and offer adequate protection to the insured. The harmonization process comprises four fundamental elements: early preparation of recovery plans, the option of an initial intervention, the application of effective resolution measures and international collaboration. In another document, EIOPA (2018a) details tools of the macroprudential framework regarding reserves and capital, liquidity, and exposure, including preparatory R&R plans.

All this led to the formulation of the objectives of this research and the corresponding hypotheses, as follows:

Objective 1: Identify the methods of controlled exit from the market of insurers through resolution and not through bankruptcy/liquidation in an easy, safe, and orderly way, with the reduction of social costs, without impacting consumers and the economy:

Ip.1.1. Insurance failures severely affect consumers and the economy.

Ip. 1.2. Exiting non-viable insurers from the insurance market is difficult, seriously affecting customers and the socio-economic environment. The difficulty of removing failing insurers without impacting consumers and the economy highlights the need for a more streamlined and effective resolution process

Objective 2: Ensuring real consumer protection and timely payment of compensation to those affected by the insolvency of non-viable insurers, or the application of the NCWOL principle:

IP. 2.1. Creditor insurance protection is limited; guarantee schemes vary, and many countries do not have such schemes.

Ip. 2.2. The resolution systems have low applicability, which causes long durations for the payment of compensations for affected consumers, creating distrust in the insurance system, and affecting the finances of uncompensated creditors over time.

Objective 3: Clearly defining the public interest to avoid disruptions at the level of society, preventing the impact on financial markets and public funds:

Ip. 3.1. Insurers' regulatory framework and resolution mechanisms are limited to a few countries with uneven practices.

Ip. 3.2. The use of public funds must not be a solution in any of the resolution methods; in case of necessity, it is required to use a resolution fund established prior to the application of the resolution method.

Ip. 3.3. The guaranteed schemes and the application of the resolution methods ordered by the resolution authority, together with the management of the resolution fund, must work in concert with the public interest.

Objective 4: Unitary consolidation of the national and European frameworks for resolution and the creation of pillar IV in the general insurance supervision framework, alongside the 3 pillars established by the Solvency II directive:

Ip. 4.1. The regulations and mechanisms available to countries with legislation related to the resolution of insurers are similar. However, there are also significant differences, resulting in the need to identify best practices given future harmonization and propose possible changes for future European directives.

Ip. 4.2. EIOPA, together with several national authorities and the global Association of Insurance Supervisors, have come up with proposals for approaches related to the contexts they manage, resulting in the need to standardize approaches and create synergy.

Ip. 4.3. The resolution must be established in Pillar IV of the insurance regulatory framework, in addition to prudential supervision, when prudential methods are ineffective.

Objective 5: Clarification of the NCWOL principle in order not to impede the application of resolution and clarification of the bail-in resolution method to facilitate the success of the transition of the insolvency or non-liquidation period of an insurer:

Ip. 5.1. NCWOL must ensure the correct compensation of insurance creditors after transferring rights or involving a guaranteed scheme by creating a resolution fund.

Ip. 5.2. The "No Creditor Worse Off than in Liquidation" (NCWOL) principle can hinder the resolution process by creating difficulties in its application. This principle, while intended to protect creditors, may need reanalysis to ensure it enables effective resolution outcomes.

Ip. 5.2. The non-existence of some methods or their summary legislation, can encumber the resolution processes by limiting the options and the non-viability of the resolution compared to the classic bankruptcy.

Ip.5. 4. The lack of a resolution fund reduces the compensation capital for creditors who may be affected by the resolution or prevents the financing of the implementation of the resolution methods.

4. Results

Several case studies investigate the resolution issues addressed in the insurance sector, highlighting contexts characterized by poor or partial regulation, underlining the imperative of a coherent and extensive approach to this topic. Thus, during the global financial crisis, the resolution of the American insurer AIG involved the intervention of the US government, which provided financial support and temporarily took control of the company (Salter, 2013). Also, in the resolution of the British insurer Equitable Life, the process involved an investigation by the Financial Supervisory Authority of Great Britain, culminating in awarding compensation to customers who suffered losses (Reurink, 2019). In the American insurer Penn Treaty situation, the resolution involved shutting down the company and awarding compensation to its customers through the US Insurance Guarantee Fund (Mohey-Deen & Rosen, 2018). In the case of the Dutch insurer Conservatrix, the resolution involved a temporary takeover by the Dutch Financial Supervisory Authority and restructuring the business to ensure long-term stability and viability (Mosch & Prast, 2010). The resolution of Maltese insurer Satabank involved the Malta Financial Supervisory Authority withdrawing its license and compensation to customers through the Malta Financial Services Compensation Fund (Ayadi, Arbak, & Pieter De Groen, 2013).

4.1 Benefits and challenges of the regulatory framework

Identifying the methods of controlled exit from the insurers market through resolution in an easy, safe, and orderly way, with the reduction of social costs, was achieved by analysing the current regulatory framework. According to Van Hulle (2019), developing a regulatory regime that protects 100% of insurance policyholders is possible, but this could be the end of the insurance industry. In an ideal world, we would have Solvency II, combined with guarantee and R&R schemes, designed simultaneously. If guarantee and R&R schemes are introduced now, it must be ensured that the regulatory regime is coherent. Solvency II is very concerned with preventing insurers from getting into financial difficulty but does not explicitly address the consequences of bankruptcy beyond final supervisory action in case of a breach of the Minimum Capital Requirements.

EIOPA (2018b) publishes a document in which three sources of funding for resolution are identified: the assets and liabilities of the undertaker in difficulty, the national resolution fund, and the policyholder guarantee schemes. It also proposes that the

Solvency II Directive clearly sets the resolution objectives, without a predefined hierarchy (EIOPA, 2022a). The main benefits of this recommendation are:

- protecting the insured, the beneficiaries, and the injured third parties.
- maintaining financial stability, particularly by preventing contagion and maintaining market discipline.
- ensuring the continuity of the insurer's functions, the disruption of which could harm financial stability and/or the real economy.
- protecting public funds.

The upcoming revision of the Solvency II Directive and the proposed European Commission directive on insurance recovery and resolution in 2021 provide an excellent opportunity to address the current fragmentation in insurance guarantee systems. Due to varying regulations of guarantee or resolution schemes across different countries, policyholders may receive different levels of protection if their insurer is not based in the EU. This can lead to significant delays in claim settlement, eroding public trust in the insurance industry. It is crucial to prevent the use of public funds and ensure an orderly exit from the market if necessary. EIOPA outlines the general framework of the directive, including preventive planning, resolution authorities, objectives and conditions, and proposed resolution mechanisms. They also provide three compelling reasons for the need to establish a harmonized recovery and resolution framework for (re)insurances, such as the proposed IRRD Directive:

- a) The 2008 financial crisis demonstrated the need for adequate recovery and resolution frameworks for different financial sector segments, including (re)insurance.
- b) Insurer failures and their problems, which are not rare. More concretely, even though the Solvency II Directive produced a positive impact, it is not a zero-failure regime.
- c) The key attributes of the FSB and IAIS, which established new essential elements, resolution tools, and requirements for planning and cross-border cooperation, are clear arguments for the need for a harmonized framework to facilitate the effective resolution of any financial institution that may have systemic importance.

The review of the EIOPA recommendations (2022b) mentions that conflicts between supervisory and resolution interests may arise when an insurer falls into difficulty. These conflicts can be due to lenient supervision, misaligned measures, or a focus split between supervision and resolution preparation, necessitating better coordination and dialogue. The resolution function is separated from the oversight function to mitigate these conflicts while ensuring good dialogue. For this reason, the authors of this article insist on connecting the resolution with the existence of guaranteed schemes that ensure the necessary financing through resolution funds set up *ex-ante* or *ex-post*.

According to IAIS (2021), from the perspective of resolution powers, the defined standards (ICP 12) both emphasize the need to develop an appropriate range of competencies and recommend competencies that should be available to the resolution authority. The analysis of the benefits of these standards is summarized through the prism

of three points of view. Considering the aspects of responsibility, the competencies have been grouped as follows:

- a) Taking control of insurance involves implementing measures designed to manage and regulate the situation. These measures include appointing an administrator or manager, renouncing the priority of shareholders in favour of creditors, and changing the organizational structure by retaining, removing, or replacing members of management and key persons. There are also prohibitions on certain payments and transfers, such as the prohibition on the distribution of dividends or variable remuneration, as well as the transfer of assets. New business licenses may be withdrawn, and the existing business may be placed into liquidation. Restructuring mechanisms include selling or transferring shares to a third party, curtailing or reducing liabilities, and distributing losses to creditors and policyholders. Contracts, rights and obligations, including those of insurance, may be terminated, continued, or transferred, without the agreement of the reinsurer, to another viable undertaker.
- b) Suspension of rights in the context of insurance, which involves implementing temporary restrictive measures. These measures include restricting or suspending the rights of insurance policyholders to withdraw their insurance contracts. In resolution, the ceding insurer's reinsurers have the right to stop or refuse to reinstate coverage after applying the resolution mechanisms and may order the stop of payments to non-binding creditors. Creditors can also request measures on assets, including cash flows from the insurer. The temporary measures aim to stabilize the financial situation and effectively manage the resolution process.
- c) The liquidation process can occur in various circumstances, including insolvency, bankruptcy, or other significant financial difficulties for the insurer. The financial supervisory authorities must regulate the liquidation and aim to protect the interests of policyholders and other parties involved.

Upon analysing the resolution methods from the standpoint of the bridge institution, certain essential powers become apparent to implement this measure effectively. To that end, it is imperative to guarantee the uninterrupted provision of critical services and functions and temporarily suspend the right to terminate financial contracts prematurely.

FSB (2014) identifies key attributes that provide a list of the necessary competencies in the resolution process that the resolution authority will have in order to achieve its own objectives and reduce the financial impact. These attributes include the ability to reduce the book value of equity and write off shares or other ownership instruments of the insurer. The resolution authority should also be able to flag unsecured creditors' claims and convert their unsecured claims into equity or other property instruments, of the insurer or successor entity, e.g. the bridge entity or the takeover by the parent company. Other key powers include pre-emption of existing shareholders' preemptive rights, through the issuance of new forms of ownership, including warrants for subordinated debts or for holders of eligible property instruments during internal recapitalization and restructuring of insurance obligations.

Based on the existing practice with the colleges of supervisory authorities, which currently act for international insurers in the home countries alongside the authorities in

the host countries, the authors of this article argue at the EU level that EIOPA will have to establish a committee in which all the heads of the supervisory authorities resolution to be represented in the form of a *Resolution Committee*, to participate in the resolution colleges and, in general, to promote the convergence of resolutions.

4.2 Tools identified in the operation of the resolution's mechanism

Analysis of EIOPA recommendations (2022a) summarizes the mechanisms proposed in the directive in a way that offers increased flexibility, adapting to the specifics of each situation. These mechanisms include bail-in (internal recapitalization), which involves the reduction of liabilities or their conversion into shares, with the stipulation that policyholders cannot receive shares. A solvent run-off is also proposed, which involves the withdrawal of the authorization and liquidating the portfolio. Selling part or all of the business to third parties is another option, while the publicly controlled bridge entity temporarily manages the assets and liabilities. Asset and liability separation allows the transfer of troubled assets and/or liabilities to a specialized vehicle. In addition, the proposal provides for additional specific measures at the national level, provided they are compatible with the general framework of the directive.

According to studies by Stolk (2018) and research by Siri and Van den Hurk (2022) in the Netherlands, four essential resolution methods are distinguished, three of which are explained in detail. The first method consists of transferring the insurer's activity, possibly in two distinct forms: transferring to a private entity of financial instruments or transferring assets and liabilities. The second method involves transferring to a bridge institution, a public entity such as a scheme, or a guarantee fund when there is insufficient time for a private transfer. The third method consists of separating assets and liabilities, a decision taken in a complementary way to one of the first two mentioned methods, and the fourth is represented by bail-in.

The results obtained highlight the necessary tools for the resolution mechanism:

1. The Bail-in method. It is a method taken from the banking system that leads to restructuring, limiting, or reducing liabilities. In accordance with EIOPA, the order of compensation should respect the principle that no creditor should suffer a loss greater than the one he would have incurred through a classic liquidation procedure (NCWOL principle), but at the same time the principle of equal treatment for creditors in a certain category could be made more flexible.

There are several bail-in application scenarios, distinguishing between a return to activity after resolution through recapitalization and an internal recapitalization when the insurer's insolvency is confirmed. In the first scenario, the insurer will return to a solvent position, not conclude new insurance contracts, and will remain in the market only to exhaust existing insurance policies. In the second scenario, the insurance portfolio is transferred to another insurance company, and the insurance entity will eventually be liquidated. For example, in Romania, the appraiser's report must contribute to substantiating the decision regarding the extent to which "shares or other property instruments are cancelled or diluted, as well as the extent to which there is a reduction in value or the conversion of liabilities into relevant capital instruments" (Romanian Parliament, 2015). The identified company obligations, technical and non-technical, must be analysed and identified if they can be converted into capital instruments. The database

of the approved damage reserve is analysed, a complete analysis of this scenario can only be possible if the database is filled with all the information. The company's other debts have a "low value and high volume" pattern, regardless of whether the holder is a supplier, spare parts distributor, car service, or insurance broker. It seeks to identify very high-value single liabilities to a single beneficiary, which, if converted into equity instruments, could significantly impact the company's (at that time) equity position. Suppose the method of cancelling/diluting the shares is applied because the total equity of the company is negative. In that case, the result will create an even greater gap between the total debt and the available equity. That is why it is necessary to identify any other significant instruments owned, which could be allocated in equity, to have a significant impact on them and which could change the company's position regarding its equity.

2. Solvent-run-off method. It is a proven method whereby an insurer no longer undertakes, and does not develop new businesses, and only manages the current activity. Under the solvent run-off, the insurer may still pay its obligations at the time of their eligibility. In the event of run-off insolvency, the insurer can no longer fulfil its obligations towards creditors. However, resolution authorities should assess the appropriateness of the choice and use of resolution powers on a case-by-case basis. The use of powers should be proportionate to the nature, scale, and complexity of the insurer, depending on the circumstances.

3. Method of partial or total sale of the business. The business sale mechanism is also known outside of resolution, with all jurisdictions having related approaches. According to Romanian legislation (2015), insurance and reinsurance contracts can be transferred, and the value of the respective contracts can also be modified or reduced. The resolution administrator has the authority to transfer any reinsurance associated with the transferred policies without the consent of the reinsurer, provided that adequate collateral is in place. Outside the resolution framework, the resolution authority can approve the transfer of the portfolio, assets and the capital of the insurer in the resolution procedure, regardless of the type of assets, liabilities and other rights of the insurer that is no longer viable. These prerogatives emphasize the power and flexibility of action that a resolution authority has in managing and transferring assets and liabilities in the resolution of insurers.

4. The method of creating the bridge institution. A bridge institution is a legal person controlled by the competent authority and created to receive and hold partial or total equity or other forms of equity related to an insurer to which this resolution mechanism is applied in order to support the operational critical functions and some commercial activity. In the guaranteed scheme in Romania, the Guarantee Fund of the Insurers (FGA) may be authorized to exercise the competence of a bridge institution. As the competent authority, the Romanian Financial Supervisory Authority (ASF) can approve the bridge entity's financing with a share capital below the level required in Solvency II, which cannot be lower than EUR 2,000,000. In the situation where the instrument of the bridge institution is applied, the ASF, in its capacity as resolution authority, take care of the balance between the assets and liabilities transferred through the resolution mechanism, so that the insurance obligations do not exceed the value of the assets and rights that the bridge entity receives.

5. The asset and liability separation method. If the asset separation tool is applied, the objective of the newly created legal entity is to protect the transferred assets for future

preservation and fruition outside the form of liquidation procedure, or by simple sale. In this regard, one or more Special Purpose Vehicles (SPVs) are created to manage the assets and liabilities of the insurer to which this resolution mechanism applies. The transfer to this vehicle does not require the fulfilment of any procedural legal elements or approvals of the previous shareholders, being a decision only at the level of the bridge entity, with the approval of the resolution authority.

Assessment plays a crucial role in the resolution process before and after implementing measures. The underlying principle is to treat all creditors in the same category equally and prevent any one creditor from bearing disproportionate losses. After applying the resolution measures, an evaluation is conducted to determine whether there were different treatments from the usual liquidation procedure, and whether the creditors and entitled shareholders should receive any compensation. If they have suffered more significant losses, they are entitled to receive the difference through financing mechanisms. Overall, the resolution process aims to protect all categories of creditors and maintain a non-discriminatory approach.

5. Discussion

Resolution and resolution instruments are administrative and not judicial in nature. The main consequence of the administrative nature of this procedure is that it is carried out without the participation of the courts, as is the case with judicial reorganization. States establish resolution authorities that order measures and supervise the resolution regime. A unique feature of the resolution is the specialty of this procedure, in the sense that it applies only in exceptional cases and to entities regulated by law. This application through a specific legal framework supports Assumptions and Objective 4 of this research, which defines a Pillar IV alongside the other pillars of the Solvency II directive by supplementing it or approving a separate directive proposal. The valuation indicates the distribution of creditors by category, according to respecting the legal interests and rights of creditors and shareholders eligible to receive treatment similar to that of the classic bankruptcy and liquidation procedure and estimating possible compensation from the resolution fund, if applicable. estimate which does not affect the principle detailed above, according to which no creditor should be disadvantaged. On the other hand, in parallel with the usual bankruptcy procedure, the purpose of the latter is to satisfy the rights of insurance creditors, the consumers of insurance reports being the best protected among all the creditors participating in an insolvency procedure.

The previous section's presentation of the regulatory framework and the necessary instruments for applying the resolution mechanism validates Hypotheses 1.1 and 1.2 of Objective 1. In addition to the regulatory framework of Pillar IV, Hypothesis 3.3 supports Objective 3 of this article through the systemic integration of guaranteed schemes in the conception of the recovery framework. The regulatory framework in Romania faced several major insurance bankruptcies between 2015 and 2023 (Vasilache, 2021; Păunescu, Nichita, Lazăr, & Frățilă, 2022; Andrei, 2023). The specific legal framework analysed highlights the serious effects of insolvency and bankruptcy on consumers of financial services, both individuals and companies, indicating a need for a more robust and consistent resolution mechanism. More exactly, in Romania, as in other EU countries, in

case of bankruptcy, the claims of insurance creditors are covered, within the limit of a maximum guarantee ceiling, by the Policyholders' Guarantee Fund. It should be noted that the Fund is entitled to the payment of insurance claims within 60 days from the date of withdrawal of the operating authorization and the ascertainment of the insolvency of the insurer, the purpose being the protection of insurance creditors from the consequences of the insolvency of an insurer.

The possibility of reforming some aspects of the protection framework of the financial services clearing system to ensure that depositors and policyholders are appropriately protected in the event of insolvency and paid promptly validates hypotheses 2.1 and 2.2 of Objective 2 of this article. Resolution refers to the situation in which an insurer is no longer viable or is likely to be no longer viable in the next period. The regulator prepares the resolution plan, although input from the insurer is also sought. It outlines the steps that can be taken to defuse the crisis, protect clients' interests, and restrict the spread of systemic risk.

In accordance with the triggers specified in the FSB's key attributes, the criteria leading to the triggering of resolution are defined as follows:

- if the insurer's critical functions are no longer viable or are indications that it would lose its operational and administrative capabilities essential to a good functioning, although recovery measures have been ordered, affecting the clients and in general the financial system.
- thereby applying and failing the previously mentioned recovery plans or by excluding them as unfeasible to bring the insurer back to viability within a reasonable time.
- the need for resolution action in the public interest, which all three of them leads to the validation of hypotheses 3.1 and 3.2., this approach is consistent with Objective 3 of this article.

The uniform consolidation of national frameworks for resolution and the establishment of Pillar IV in the general framework of insurance supervision, alongside the 3 pillars defined by the Solvency II directive, represent a crucial step in the evolution of insurance regulations at the European level and by validating hypothesis 4.1, the very basis of this research. Although the regulations and mechanisms available in countries with specific legislation for resolving insurers show similarities, there are also significant differences. This requires identifying best practices for future harmonization and formulating amendment proposals for subsequent European directives. In this sense, EIOPA, in collaboration with various national authorities and the global Association of Insurance Supervisors, developed approach proposals adapted to the contexts they managed, emphasizing the need to standardize approaches and create an effective synergy, which leads to validating hypotheses 4.2 and 4.3. Thus, according to Objective 4, the resolution must be considered an essential Pillar IV of the insurance regulatory framework, complementary to prudential supervision, intervening in situations where prudential methods prove ineffective.

Assumptions 5.1 – 5.4 of Objective 5 are supported by EIOPA's opinions, which insist on guaranteeing adequate safeguards in exercising resolution powers. These powers should be exercised to respect the order of payment of creditors in parallel with the

assurance of a degree of flexibility in the application of their equal treatment for the same category of creditors. Another important aspect is to avoid those creditors, including insurance policyholders, suffering losses greater than those suffered in liquidation in an ordinary insolvency procedure, which is called the principle NCWOL, meaning that "No Creditor is Worse Off than in Liquidation." This principle ensures that creditors, including policyholders, receive in the resolution at least the compensation to which they would be entitled in a bankruptcy procedure resulted from insolvency. Objective 5 also supports expanding and elaborating the bail-in concept. In the case of adopting the bail-in method, which involves the allocation of losses to insurance policyholders, resolution authorities should respect specific safeguards. These include reserving the allocation of losses to policyholders as an option of last resort, used only after other viable measures have been exhausted or when they are considered unlikely to succeed. This approach is seen as complementary to the success of the other mechanisms and powers in place, such as facilitating a portfolio transfer and, implicitly, limiting losses for insurance policyholders.

Limitations and Future directions

The insurance recovery and resolution regulatory framework varies by jurisdiction, regulator, and differentiation criteria, creating harmonization difficulties (Kalfin, Sukono, Supian, & Mamat, 2022). This lack of uniformity hinders the effectiveness of resolution measures and complicates international cooperation, leading to potential gaps in protection for policyholders across different regions.

The failure to fully detail the application mechanisms of the NCWOL principle could result in significant breaks in the resolution process. Ensuring creditors receive fair compensation equivalent to liquidation outcomes requires clear legislation and possibly the establishment of a resolution fund. This issue needs further discussion.

6. Conclusion

The application of resolution powers is guided by an important principle that requires careful analysis and detailed consideration in order to ensure ethical benefits without affecting the efficiency of resolution mechanisms. In the opinion of the authors of this article, failure to fully detail application mechanisms could result in a significant break in resolution. This principle, known as NCWOL, ensures that creditors receive fair compensation if the resolution process disadvantages them more than if the insurer were to be liquidated. As mentioned in the limitations and future directions section, this means that creditors should receive an outcome that is equivalent to what they would receive in liquidation. For instance, if a resolution authority orders prompt payment to insurance policyholders, unexpected debts may arise, resulting in future claimants receiving lower rates than they would in liquidation. In such cases, there must be a legal framework that allows for the compensation of any losses confirmed by the NCWOL assessment so as not to hinder the successful application of resolution mechanisms. One way to achieve this objective would be through the operation of a resolution fund. More exactly, the resolution fund established to support the resolution mechanisms will ensure the continuity of the insurer's critical functions, avoiding the negative impact on the economy

as a whole and the contagion in the insurance market. In this sense, it is necessary to develop specific professional skills in the fields of financial analysis, risk management, claims analysis, reinsurance, legal, etc. to represent the interests of the resolution fund vis-à-vis third parties (adjutants, liquidators, public authorities, etc.). The fund should be supported financially by the ex-ante contribution of insurers in the market, up to a certain safety limit for quick action in case resolution procedures are triggered.

According to the article's authors, the application of NCWOL should prioritize protecting consumers' rights to fair compensation. However, this analysis must consider both ex-ante and ex-post components to avoid overly general criteria that could prematurely dismiss viable resolutions. To ensure a quick response, a resolution fund should be established ex-ante, with ex-post applicability to compensate for any uncompensated differences in the event of bankruptcy. It's crucial to conduct a quantitative assessment of the financial compensation generated by a guaranteed scheme (where available) and a qualitative assessment of the compensation timing to address urgent creditor needs, particularly in the case of health and life claims. Bankruptcy can erode trust in the financial system and indirectly affect developing markets, making competitive insurance prices more challenging to achieve.

Despite the introduction of new prudential legislation under Solvency II and prudential supervision, bankruptcy risks have not decreased. The European Commission, as well as EIOPA, acknowledge this fact and support the new European directive on recovery and resolution. Guarantee schemes are a crucial component of a comprehensive recovery and resolution supervisory framework, acting as a safety net in last-resort scenarios. Regulations related to the fourth pillar are well-reasoned, supported by sound arguments that address assumptions and objectives.

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