



## The effects of reinsurance premium outflow on the growth of the reinsurance industry in Zambia

Deborah Mafu<sup>1</sup>, Dr Joshua Munkombwe<sup>1</sup>, Erastus Mwanaumo<sup>2</sup>

<sup>1</sup> Department of Business Studies, Graduate School of Business, University of Zambia, Lusaka, Zambia

<sup>2</sup> Professor, Department of Business Studies, Graduate School of Business, University of Zambia, Lusaka, Zambia

### Abstract

The study aimed at investigating the effects of reinsurance premium outflow on the growth of the reinsurance industry. This research addresses a significant problem: Zambia's heavy reliance on foreign reinsurers, which results in substantial capital outflows, limiting local industry growth. Understanding this issue is crucial for strengthening Zambia's economic stability and promoting local investment. The study was guided by a set of specific objectives. These were: (i) To explore the factors driving reinsurance premium outflows from Zambia; (ii) To examine the regulatory factors influencing risk retention within Zambia's domestic market; (iii) To examine the challenges faced by local reinsurers in retaining risks; (iv) To design strategies that address reinsurance premium outflows. A mixed-methods research design was employed. A sample size of 154 respondents was adopted for a target population of 251, these encompassed policymakers, representatives from the reinsurance industry, insurance industry, the regulator, financial analysts, and academic experts in finance and economics. Stratified sampling was used to select the sample size. For purposes of collecting primary data, the study utilized structured questionnaires and in-depth interviews. Quantitative and qualitative data were analyzed using STATA 14.2 and ATLAS.ti 9.0, respectively. Findings indicate that 67% of respondents cited capacity constraints among local reinsurers as the primary reason for transferring risks abroad, while 51% emphasized the perceived expertise of foreign reinsurers. Regulatory challenges, such as solvency requirements and capital constraints, were also highlighted as significant barriers to local risk retention. From the findings, 56% of participants suggested that while there is a moderate overall influence on the decision to transfer risks, specific factors like capacity constraints among local reinsurers and the perceived expertise of foreign reinsurers play crucial roles. It was also found that 44% of respondents identified capacity constraints, perceived expertise, and financial strength as significant influences on the decision to retain risks locally, emphasizing the importance of local capabilities. Challenges such as a lack of capital (62% of respondents), solvency requirements (48%), and lack of regulatory support (53%) were recognized. While the Insurance Act No. 38 of 2021 offers opportunities for improvement, 71% of respondents called for flexible capital requirements, localization of specific insurance lines, and streamlined processes. Based on these findings, the study recommends establishing reinsurance pools to consolidate capacity and mitigate outflows. The regulator should prioritize enhancing local reinsurers' capacity by adopting flexible capital requirements and streamlining regulatory processes. Investments in technical skills development programs and advanced technology adoption are also advised. These insights provide actionable steps for policymakers, regulators, and industry stakeholders to improve local retention, foster industry growth, and reduce dependence on foreign reinsurers. The study underscores the need for strategic policy interventions to strengthen Zambia's reinsurance sector and bolster economic resilience.

**Keywords:** Reinsurance, premium outflow, capacity constrain, insurance

### Introduction

The growth and resilience of any insurance market depends significantly on its ability to manage risk through reinsurance, which serves as a financial safety net by spreading liabilities across multiple entities. Reinsurance enhances solvency, boosts underwriting capacity, and supports market stability, especially during large-scale or catastrophic events (Swiss Re, 2004; OECD, 2018) [25]. In emerging markets, however, the effectiveness of reinsurance is shaped not only by access to global capital but also by the strength of local reinsurance capacity. In Zambia, although the insurance industry has seen consistent growth in gross written premiums, local reinsurance participation remains limited, resulting in significant premium outflows to international markets (PIA, 2022).

These outflows, often referred to as reinsurance premium externalization, are common in many developing economies and raise concerns about capital flight, foreign exchange strain, and missed opportunities for local economic development. Despite policy efforts to encourage domestic retention, including the enactment of the Insurance Act No.

38 of 2021, Zambia continues to rely heavily on foreign reinsurers due to structural challenges such as capital inadequacy, capacity, limited technical expertise and security ratings (AIO, 2016).

This study aims to provide insights into achieving a balance between maintaining market efficiency and building a self-sustaining domestic reinsurance industry capable of retaining greater risk within Zambia.

### Research Problem

Zambia's dependence on foreign reinsurance providers has resulted in a steady outflow of premium payments, which in turn reduces local capital reserves, impacts investment capacity, and hinders the insurance sector's potential to contribute to broader economic growth. In 2022 alone, 63.8 percent of reinsurance premiums were sent abroad, amounting to K1.6 billion (PIA, 2022). This outflow presents a multifaceted challenge: it affects economic stability by reducing funds available for domestic reinvestment and weakens the balance of payment. The diminished local liquidity and limited reinvestment also

have implications for employment opportunities and government revenue, influencing the wider economic environment.

The limited capacity of Zambia’s reinsurers further compounds the problem. Although the country has four licensed reinsurers, they retain only 36.2 percent of reinsurance premiums, with the remainder being ceded internationally due to low capital reserves and limited underwriting capacity (PIA, 2022). The lack of technical expertise and insufficient financial strength prevents local reinsurers from offering competitive reinsurance solutions, making them less attractive to insurers seeking risk coverage.

This situation presents challenges for diverse stakeholders, including government agencies, financial regulators, and the insurance industry itself. Various parties are vested in addressing these outflows to strengthen the domestic financial landscape and reduce economic reliance on foreign entities. Recent legislative measures, such as Zambia’s Insurance Act No. 38 of 2021, have sought to encourage local retention of insurance capital and foster economic resilience. However, little is known about how effectively these reforms have addressed the root challenges or the specific ways that reinsurance premium outflows shape Zambia’s economic trajectory and the insurance market’s development.

This research seeks to provide an analysis of the socio-economic effects of reinsurance premium outflows on Zambia’s local industry and to generate insights that can inform policies aimed at enhancing economic stability and fostering growth in the reinsurance sector.

**Aim or Purpose of the study**

To investigate the effects of reinsurance premium outflow on the growth of Zambia’s reinsurance industry and propose strategies to enhance local risk retention.

**Research Objective**

To explore the factors driving reinsurance premium outflows from Zambia.

**Literature Review**

**Concept of insurance and reinsurance and its importance**

Insurance is defined as a mechanism of transferring risk whereby individuals or corporate organizations shift some life uncertainties to other business enterprises’ shoulders and in return pay premiums for the risk transfer (Vaughan and Vaughan, 2007) [28]. Reinsurance plays a major role in the performance of insurers by limiting losses, providing capacity, protecting solvency margins, and creating financial stability. Insurers will therefore purchase reinsurance for one or the other reasons. Most of reinsurance demand studies consider that insurers purchase reinsurance for the same reasons that motivate firms in other industries to purchase insurance or to actively manage their risks: limiting the expected costs of financial distress, stabilizing sources of funding, decreasing expected taxes by exploiting the convex structure of the tax code, and gaining comparative advantages in real services production ( Jean-Baptiste and Santomero, 2000; Cole & McCullough, 2006; Powell & Sommer, 2007; Adams, Hardwick and Zoo, 2008) [12]. Maximization of expected utility is another motivation for reinsurance demand (Aase, 2004; and Kaluszka and Okolewski, 2008).

(Garven and Lamm-Tennant, 2003) [8] highlight the importance of reinsurance in reducing the expected costs of bankruptcy induced at high leverage. And it is evident that, the insurance companies, because of the nature of their business, which is based on risk management and its coverage, usually have high probability of increased volatility in their cash flows and purchase reinsurance so that the risk of bankruptcy and the expected bankruptcy cost can be reduced (Mayers and Smith, 1990) [14]. This means that reinsurance serves as the economic risk management tool that cushions the effect of the risks that overwhelm the business operating capacity insurance companies. (Garven and Lamm-Tennant, 2003) [8] contended that the use of reinsurance reduces the effects of large, unexpected losses and increases the probability the insurer would benefit from investment in tax-favoured assets.

**Theoretical Framework**

**Corporate Demand Theory:** This theory explains that insurers purchase reinsurance to maximize corporate value by managing risk exposure, with demand influenced by firm size, ownership structure, diversification, and capital constraints. Mayers & Smith (1990) [14] and Plantin (2006) [23] emphasize that reinsurers arise to monitor and finance insurers, explaining patterns in reinsurance purchasing.

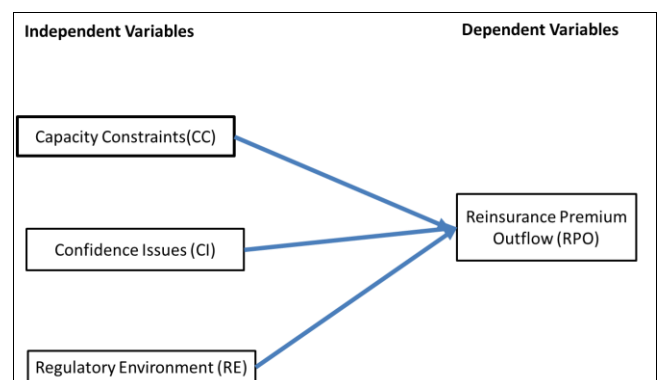
**Risk Theory:** Provides the actuarial and mathematical foundation for reinsurance by modeling losses as stochastic processes. It guides premium pricing and retention decisions, focusing on risk pooling and tail risk mitigation. Beard (2008) [2] and others show how reinsurance stabilizes profits and solvency by capping extreme losses.

**Conceptual Framework**

The conceptual framework identifies Reinsurance Premium Outflow as the main outcome influenced by:

- **Capacity Constraints:** Limited financial and capital capacity in domestic and regional reinsurers forces insurers to purchase more from foreign reinsurers.
- **Confidence Issues:** Insurers’ trust or mistrust in local reinsurers affects their willingness to cede risk locally versus internationally.
- **Regulatory Environment:** Laws and policies (e.g., mandatory cessions, capital requirements) shape how and where insurers cede their premiums.

These factors interact such that greater capacity constraints and lower confidence generally increase premium outflows, while a supportive regulatory environment can reduce reliance on foreign reinsurers.



**Fig 1: Conceptual Framework**

## Review of Literature

The literature underscores the recurring challenge of reinsurance premium outflows across developing economies. Adetiloye (2011) found that in Nigeria, premium outflows negatively, though insignificantly, impacted domestic investment due to factors like exchange rate volatility and weak investment activity. Nampila (2018)<sup>[19]</sup> found that despite government efforts in Namibia, significant reinsurance premium outflows persisted, undermining national financial performance, while Woldegebriel (2010)<sup>[29]</sup> revealed that in Ethiopia, cross-border reinsurance weakened the insurance sector's economic contribution and exposed regulatory awareness gaps. Akani (2013) pointed to macroeconomic instability and political factors as major causes of outflows in Nigeria. Mbewe (2015)<sup>[15]</sup> demonstrated that Zambia's premium outflows were driven by currency appreciation expectations and policy inconsistencies, recommending exchange controls. Njobvu (2015)<sup>[20]</sup> showed that foreign reinsurance negatively influenced Zambia's insurance penetration, while reinsurance premiums had a positive effect. Mulenga (2015)<sup>[16]</sup> and Kaoma (2020)<sup>[13]</sup> noted barriers such as legal ambiguities, regulatory limitations, low awareness, fraud, and infrastructure challenges that limited insurance penetration and performance in Zambia.

## Methods and Materials

The research used a mixed methods approach, combining both quantitative and qualitative techniques to thoroughly investigate the relationship between reinsurance premium outflows and the growth of the reinsurance industry. It followed an explanatory sequential design, where quantitative data was first gathered through surveys and historical records, then followed by qualitative interviews to provide deeper insights and context. The study was conducted in Lusaka, Zambia, focusing on key stakeholders in the financial and insurance sectors, including policymakers, industry representatives, regulators, financial analysts, and academics.

A total population of 251 individuals was identified, from which a sample of 154 was selected using stratified random sampling to ensure balanced representation across different groups. Quantitative data included statistical analysis of economic indicators and industry performance, while qualitative data was collected through in-depth interviews with influential experts and regulators. Data analysis involved descriptive and inferential statistics for quantitative information, and thematic analysis for qualitative data, using specialized software. Throughout the study, ethical standards were strictly observed, including informed consent, confidentiality, and approval by The University of Zambia Humanities and Social Sciences, Research Ethics Committee.

## Findings

The study gathered data through reliable questionnaires targeting regulators, experts, insurance companies, and reinsurers, achieving good to excellent response rates. The key driver identified is the capacity constraints among local reinsurers, cited by 67% of respondents, reflecting limitations such as insufficient financial resources, actuarial expertise, and reserves. Lack of confidence in local reinsurers was the next significant factor at 25%, while risk diversity had minimal influence.

Global market conditions also influence decisions to seek reinsurance abroad, with 66% of respondents indicating they somewhat or strongly impact this choice, mainly due to competitive pricing, broader risk coverage, and financial stability of international reinsurers. The perceived expertise of foreign reinsurers was considered very important by 51% of participants. Qualitative interviews confirmed these trends, emphasizing that local capacity limitations primarily drive premium outflows, while favorable global market conditions can make international reinsurance more attractive.

## Discussion

The findings highlight several critical factors driving Zambian insurers to transfer significant portions of risks to foreign reinsurers. The synthesis of quantitative and qualitative results indicates that capacity constraints among local reinsurers are pivotal in influencing risk transfer decisions. Quantitatively, most of respondents highlighted capacity constraints as the primary driver supporting Naidoo and Ijeoma (2019)<sup>[18]</sup> who argued that limited underwriting capacity of local reinsurers restricts their ability to accept risks from primary insurers. They also link this to increased reliance on foreign reinsurers leading to outflows of capital from domestic markets. Birnie & Wilson (2008) and Guyer & Gallen (2016) emphasize that smaller, developing markets often lack the capital and technical expertise required to absorb large, complex risks, which is a key factor behind transferring risk abroad.

The perceived expertise of foreign reinsurers is another significant factor, with 51% of respondents rating it as very important. Interview participants echoed this sentiment, noting that foreign reinsurers often possess specialized knowledge for handling complex or large-scale risks, which is often unavailable locally. As one participant noted, "Zambian companies might encounter unique or complex risks beyond the expertise of local reinsurers. Seeking foreign reinsurers provides better risk management." This reliance on foreign expertise aligns with findings by Chambashi *et al.* (2023) and Naidoo and Ijeoma (2019)<sup>[18]</sup>, who emphasize the critical role of specialized knowledge in influencing risk transfer decisions.

Additionally, global market conditions influence these decisions. Approximately 66% of respondents indicated that international market trends somewhat or strongly affect their decisions. Factors such as competitive pricing and access to specialized expertise in foreign markets make international reinsurance an attractive option. This aligns with global literature, such as (Jaffee and Russell, 1997)<sup>[11]</sup>, which emphasize the role of robust capital and diversified risk management strategies in foreign reinsurance markets. They found that the global reinsurance market's pricing is driven by larger market forces, including the availability of capital and risk management strategies. For Zambia, these factors mean that while foreign reinsurers can offer better pricing models, local reinsurers struggle to match these terms, as they are constrained by the lack of large-scale capital and limited access to global markets.

Mufaro (2022) found The main reasons why risks are placed offshore are lack of adequate local capacity on such risks, wider policy wordings than those provided by the local market, inferiority or poor ratings of local market securities, lack of confidence by clients in local market insurers and reinsurers, instructions to place with global captive insurer

or reinsurer who is abroad, retrocession arrangements of reinsurers, local terms are too restrictive and the pricing is deemed expensive, belief that local market skills and expertise is not up to scratch, achieving risk spread or diversification, political and economic considerations to do with the nature of risks amongst others.

This chapter presents a comprehensive summary and conclusion of the study's findings, which explore the repercussions of reinsurance premium outflow on the economic environment in Zambia. The assessment extends to understanding the implications of these findings on the growth and stability of the reinsurance industry. Additionally, the researcher puts forth recommendations tailored for policymakers and stakeholders within the insurance and reinsurance sector. These recommendations are strategically positioned to guide the course of the reinsurance industry and to have a meaningful impact on broader economic policies.

### Conclusion

In conclusion, this study comprehensively explored the effects of reinsurance premium outflow on the growth and stability of the local reinsurance industry in Zambia. Key findings highlight the main reason Zambian insurers look to foreign reinsurers is because local reinsurers simply don't have the capacity to handle big or complex risks. Limited financial resources, a lack of specialized expertise, and not enough reserves make it tough for local reinsurers to compete. Foreign reinsurers, on the other hand, offer expertise and better pricing that local markets often can't match. This shows the importance of local reinsurers boosting their resources and skills to reduce their reliance on international players.

### Recommendations

Based on the findings of the study, the following recommendations are given:

#### 1. Capacity Enhancement Initiatives

- Local reinsurers should form consortia or risk pools to collectively manage large and complex risks.
- Investment in risk modelling tools, data analytics platforms, and actuarial capabilities should be prioritized to enhance pricing and risk evaluation.

#### 2. Technical Skills Development

- Establish partnerships with international reinsurers to facilitate technical knowledge transfer in specialized risk areas.
- Develop specialized training programs in collaboration with industry bodies to build local expertise in underwriting, risk assessment, and pricing.

#### 3. Infrastructure and Technology Advancement

- The insurance and reinsurance sectors should adopt advanced data analytics platforms to improve risk assessment and pricing accuracy.
- Stakeholders should collaborate to establish a centralized risk data center/register to support market-wide insights and improved decision-making.

These recommendations are designed to provide actionable insights, fostering collaboration between stakeholders and policymakers to fortify the reinsurance industry's growth and stability in Zambia.

### Areas for Further Research

This study has highlighted critical factors influencing premium outflows and risk retention in Zambia's reinsurance market, as well as strategies to strengthen the domestic sector. However, the recently enacted Insurance Act No. 38 of 2021 presents an untapped opportunity for further research, particularly in evaluating its role in managing the externalization of risks.

The Act introduces provisions such as the establishment of a national reinsurance company, adjustments to solvency and capital adequacy requirements, and localization mandates for certain lines of business. These measures aim to strengthen Zambia's regulatory framework and reduce reliance on foreign reinsurers. However, the effectiveness of these provisions in practice has not yet been fully explored.

A future study could examine:

1. Evaluating the long-term impact of Zambia's Insurance Act No. 38 of 2021 on premium retention rates and risk externalization.
2. The impact of the national reinsurance company on local capacity and risk retention.

### Author contributions

**Debora Mafu:** Production of the first draft, review, and editing of writing, as well as ideation, methodological development, data analysis, and writing.

**Dr. Joshua Munkombwe:** Production of the first draft, review, and editing of writing, as well as ideation, methodological development, data analysis, and writing.

Prof Erastus Mwanauo; Critical review of the methods and material of the study

### Conflict of interest

There is no conflict of interest in this study, whether financially, non-financially, or otherwise. Therefore, we, the authors, declare no competing interests.

### Declaration of competing interest

The authors affirm that they have no known financial or interpersonal conflicts that would have appeared to have an impact on the research presented in this study.

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