Study on A Non-standard Business Model and Robust Risk Management Strategy of Insurance Fund Investments in China

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Abstract: The proportion of alternative investment assets within China's insurance portfolios has steadily grown, driven by regulatory policies and demand from market participants. These investments have evolved into vital assets for insurance funds and hold significant importance in supporting China's real economy. This paper delves into the current landscape of alternative investments in Chinese insurance funds, conducting an in-depth study of their investment practices, particularly their growing emphasis on alternative assets. We also scrutinize the factors contributing to the heightened reliance on non-standardized debt investments within the asset allocation structure of these insurers, as well as the associated risk challenges. Our research seeks to uncover the distinct characteristics of Chinese insurance companies' current alternative asset allocation structures and the risks inherent in these portfolios. We further explore risk management strategies for alternative investments and non-standard business models Chinese insurance companies adopt.

1. Introduction

At the 2022 China Insurance Industry High-Quality Development Forum, Vice Chairman of the CBIRC, Xiao Yuanqi, highlighted China's impressive standing in the global insurance landscape. He emphasized that China has become the world's second-largest insurance market, boasting total industry assets nearing 27 trillion yuan. According to his presentation, China's insurance density currently stands at 3,179 yuan per person, equivalent to 6% of North America's and 16% of the European Union's figures. Additionally, the insurance market depth in China is measured at 3.9%, representing one-third of North America's and half of the European Union's figures. These statistics underscore the substantial untapped potential for further market development.

Utilizing insurance funds, specifically through insurance investments, is a multifaceted and intricate systematic endeavor. The core of an insurance enterprise's evolution lies in harnessing the funds it accumulates through insurance premiums, navigating the time differences in insurance
payouts, and engaging in a series of investment undertakings. As the scale of these funds expands in tandem with the current economic trends, the significance of the insurance industry's role in advancing China's real economy surpasses its traditional functions of risk management and capital preservation.

Instead, the judicious allocation of insurance funds across various enterprises and projects with a diversified perspective becomes paramount. This strategic approach aims to secure stable returns while simultaneously fulfilling the financing requirements of the real economy. The effective utilization of insurance funds can augment the resources available for propelling the market economy forward. However, it is essential to acknowledge that this endeavor carries inherent developmental risks for individual enterprises and the overall economy.

Once an insurance company has received premiums from policyholders, pursuing enhanced financial gains often involves investing these funds in the market. This investment of insurance funds is a dynamic process where opportunities and risks are inextricably intertwined. From a risk management standpoint, conducting a precise analysis and assessment of the company's exposure to risks, their potential consequences, and their overall impact becomes imperative. Subsequently, a set of comprehensive strategies and measures must be formulated to bolster the insurance company's ability to optimize the investment of its insurance funds[1-4].

2. The Present State and Classification of Insurance Fund Investments in China

In terms of the size of invested assets, the investable scale has demonstrated sustained growth alongside the continuous expansion of income from the insurance business among listed insurance companies. As of 2022, State Life, Ping An, TIB, and Xinhua have reached notable milestones with investment assets totaling 5 trillion yuan, 4.4 trillion yuan, 2 trillion yuan, and 1.2 trillion yuan, respectively. Compared to the figures at the end of 2021, the year-on-year growth rates for Guoshou, Ping An, TIB, and Xinhua stand at 7.4%, 2.3%, 11.8%, and 11.1%, respectively. China Life's leading position in terms of investment asset scale is primarily attributable to the substantial premium income generated from the renewal business, which has propelled the growth of its investment assets.

Insurance investments must adhere to three fundamental principles: maturity matching, income coverage, and safety and soundness. Insurance funds inherently possess characteristics of liability, long-term orientation, and stability. These characteristics dictate that the safety of insurance fund investments serves as the foundation, maturity matching stands as the imperative, and income coverage emerges as the ultimate goal.

In line with the unique characteristics of insurance investment, China's regulatory framework for insurance investments has evolved through three distinct stages: initially focusing on cleaning up disorder and preventing risks, followed by a period of compliance development. Presently, regulatory requirements fall primarily into two categories. First, quantitative regulations stipulate investment scope, investment ratio limits, concentration limits, and risk monitoring, among other aspects. Second, implicit requirements govern the allocation of insurance assets through solvency regulations.

China's insurance investment landscape encompasses four primary domains: fixed-income investments, equities and fund investments, alternative investments, and real estate investments. Among these, bank deposits, bonds, and other fixed-income assets constitute approximately 50% of the primary allocation of insurance funds. The category of other investments, predominantly represented by alternative investment instruments, maintains a substantial presence and currently ranks as the second-largest allocation sector following fixed income. The overall proportion allocated to equities and fund investments remains steady. For a concise overview of each investment category, please refer to Table 1, which summarizes their distinctive characteristics.
<table>
<thead>
<tr>
<th>Categories</th>
<th>Characteristic</th>
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<tbody>
<tr>
<td>Fixed-income Investments</td>
<td>Fixed-income investments offer stability in returns, lower risk, longer durations, and the assurance of maturity. They align well with an insurer's capital preferences and duration requirements, anchoring insurance investment portfolios.</td>
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<tr>
<td>Equity &amp; Fund Investments</td>
<td>Equity and fund investments are instrumental in boosting investment yields and amplifying profits. The strategy involves a preference for publicly traded companies exhibiting higher dividend yields, undervalued assets, and the potential for synergistic value creation.</td>
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<tr>
<td>Other Investments Represented by Alternative Investments</td>
<td>The primary emphasis lies on non-standard debt assets, specifically favoring long-term funds with higher returns—a characteristic well-suited to insurers' investment objectives. Non-standard assets represent the second-largest investment category, following fixed-income investments. However, due to the impact of new regulations on asset management, the supply of non-standard assets has notably decreased. Consequently, non-standard investments confront a supply-demand imbalance. Given their inherent appeal and potential, insurers are particularly drawn to high-quality, non-standard assets.</td>
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<tr>
<td>Real Estate Investment as an Insurance Alternative</td>
<td>Insurance real estate investments predominantly focus on commercial, office, retirement properties, healthcare facilities, and owner-occupied real estate. These investments are typically structured using various methods, including equity investments, debt instruments, and property rights.</td>
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China's insurance investment landscape is poised to undergo three noteworthy trends in the foreseeable future:

Increased Allocation to Long-Term Bonds: Given the global trend of persistently low interest rates, insurers will likely allocate more of their investments to long-term bonds. This shift is driven by the pressure on bond investments to deliver adequate returns. Insurers will strategically leverage their time horizon to earn liquidity premiums, making long-term bonds a pivotal focus of future bond investments.

Diversified Asset Allocation: As regulatory constraints on insurance investment scopes gradually loosen, insurers will diversify their asset allocation. This will encompass opportunities in equity investments, Real Estate Investment Trusts (REITs), and other asset classes. A more expansive investment horizon is anticipated.

Rising Proportion of Alternative Assets: In response to growing uncertainty and the challenge of obtaining excess returns from traditional assets, insurance allocations to alternative assets will likely continue to rise. Long-term funds may increasingly allocate to less liquid yet high-yield alternative assets. Real estate and infrastructure projects with low capital consumption rates will remain focal points in future insurance asset allocation[5-7].

3. Alternative Investments and the Evolution of Non-Standard Business Models

Alternative investments represent a departure from conventional investing forms typically associated with traditional stock and bond markets. These investments encompass many non-public market assets, including real estate, hedge funds, private equity, commodities, and art. The appeal of alternative investments lies in their potential to provide diversification, expanded investment horizons, enhanced asset liquidity, and the prospect of higher returns. Nevertheless, investors must exercise prudent judgment when evaluating the associated risks and rewards while also gaining a clear understanding of their risk tolerance.
Alternative investments within the purview of insurance asset management companies pertain to non-standard investment vehicles, distinct from standardized investments such as secondary market stocks and bonds. This domain predominantly encompasses two primary modes: alternative product issuance and investment. These products span a spectrum of offerings, including debt, equity, and project asset support plans. When assessing the utility of insurance funds, alternative investments represent a significant and pivotal direction for asset allocation.

The term "non-standard" is employed in juxtaposition to "standard," it is important to note that no rigid definition or clear boundary demarcates the two categories. Assets like stocks and bonds traded on stock exchanges and inter-bank markets are typically regarded as standardized claims. Three principal attributes distinguish the characterization of standardized claims:

Equalization: Standardized claims, such as stocks, are uniformly divided into shares, ensuring a common unit of ownership.

Established Trading Venue and Robust Disclosure System: They are traded on fixed, well-regulated platforms with comprehensive disclosure mechanisms.

Robust Liquidity Mechanisms and Active Trading: Standardized claims benefit from well-developed liquidity mechanisms, fostering active and vibrant trading markets.

These features collectively define the nature of standardized claims in financial markets.

Non-standard business often diverges from the three characteristics mentioned above. For instance, when insurance funds engage in equity investments as angel investors, these shares typically lack a formal exchange for trading. They often cannot be easily divided into tradable units, and there may be no readily accessible public market to determine their value. Consequently, such investments fall into the category of non-standard business. Another example is when insurance funds extend loans to specific companies. These loans do not conform to the criteria of standardized claims outlined earlier and, as a result, are also classified as non-standard business.


<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
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<tr>
<td>High Yield:</td>
<td>Because of the elevated risk associated with non-standard assets, investors typically require a higher rate of return. Consequently, non-standard businesses can increase profits for banks and other financial institutions.</td>
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<tr>
<td>High Risk:</td>
<td>Non-standard assets' quality, safety, and reliability are difficult to ensure. Investors are exposed to greater default, liquidity, and legal risks. Therefore, non-standard business also requires higher risk management and control capabilities.</td>
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<tr>
<td>High Leverage:</td>
<td>As a non-standard business operates off the balance sheet, it remains exempt from regulatory constraints such as deposit and loan ratios. Banks and other financial institutions can leverage wealth management funds, entrusted funds, and similar vehicles to undertake larger investments. Consequently, this approach increases the capital utilization ratio and leverage ratio.</td>
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<tr>
<td>Highly Innovative:</td>
<td>Non-standard business encompasses various financial instruments, structures, and channels. Investors and issuers can tailor and customize these instruments based on market demand and prevailing conditions. This adaptability fosters increased product diversity and innovation within the sector.</td>
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Several advantages exist for insurance funds when considering investments in non-standard assets. Firstly, non-standard investments align with the long-duration and absolute return characteristics typically sought by insurance funds. These assets generally offer longer durations and higher yields, facilitating the absolute return objectives' realization. Additionally, insurance funds' investments in non-standard assets, such as infrastructure debt programs, can play a pivotal role in supporting the
development of major national infrastructure projects. This, in turn, ensures a stable funding source for these significant national endeavors. The primary features of non-standard business are summarized in Table 2. In contrast, Table 3 illustrates non-standard business's positive and negative impacts on the financial market and the real economy[8-10].

Table 3: The Impact of Non-Standard Business on Financial Markets and the Real Economy

<table>
<thead>
<tr>
<th>Positive Impact</th>
<th>Negative Impact</th>
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<tr>
<td>Enhanced Financial Supply: Non-standard businesses contribute to expanding the</td>
<td>Heightened Risk of Financial Bubbles: Non-standard business, often lacking</td>
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<td>array of available financing channels and options for the real economy. This is</td>
<td>effective regulation and constraints, can facilitate excessive market speculation.</td>
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<tr>
<td>particularly beneficial for small and medium-sized enterprises, private</td>
<td>This may result in artificial market demand and price signals, leading to a</td>
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<tr>
<td>enterprises, and other entities that encounter challenges accessing traditional</td>
<td>misallocation and wastage of financial resources. In extreme cases, it has the</td>
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<tr>
<td>bank loans. Non-standard business offerings can alleviate their financing</td>
<td>potential to trigger a financial crisis.</td>
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<td>difficulties and reduce associated high costs.</td>
<td></td>
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<tr>
<td>Fostering Financial Innovation: Non-standard businesses drive financial</td>
<td>Diminished Financial Regulation: Non-standard business practices can increase</td>
</tr>
<tr>
<td>institutions and market participants to innovate in product development and</td>
<td>banks' just-in-time obligations, consequently elevating liquidity and credit</td>
</tr>
<tr>
<td>service enhancement. This innovation leads to improved financial efficiency and</td>
<td>risks for banks.</td>
</tr>
<tr>
<td>competitiveness while catering to the personalized needs of diverse customers.</td>
<td></td>
</tr>
<tr>
<td>Diversification of Financial Risks: Non-standard businesses contribute to risk</td>
<td>Non-standard business activities can exert upward pressure on general funding</td>
</tr>
<tr>
<td>mitigation by dispersing risk across diversified portfolios and a variety of</td>
<td>rates, subsequently elevating the real economy's financing cost.</td>
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<tr>
<td>investment entities. This diversification reduces the concentration of risk</td>
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<tr>
<td>associated with individual assets or institutions and enhances the resilience of</td>
<td>Implementing stricter channel regulations and enhanced transparency measures</td>
</tr>
<tr>
<td>the financial system.</td>
<td>may negatively impact non-standard businesses, potentially leading to reduced</td>
</tr>
<tr>
<td></td>
<td>non-standard financing and influencing the development of associated industries.</td>
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<tr>
<td></td>
<td>Non-standard business has the potential to fragment financial markets, thereby</td>
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<td></td>
<td>diminishing the efficiency of financial resource allocation.</td>
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5. Risks Associated with the Alternative Investment Non-Standard Business Model

5.1 Regulatory and Legal Risks

Non-standard businesses often operate within a complex regulatory and legal landscape, significantly amplifying their risk profile. This heightened risk is attributed to two primary factors. Firstly, the regulatory environment imposes stringent demands on non-standard businesses. Financial institutions are mandated to fortify their internal controls and risk management protocols to ensure compliance with regulations and the stability of their operations. Secondly, non-standard business operations entail elevated legal risks, encompassing various contracts, debt relationships, and intellectual property rights. Consequently, financial institutions must possess robust legal risk management capabilities. This legal risk is presently the foremost challenge confronting non-standard businesses, and it has proven to be a pitfall for many institutions and individuals alike,
5.2 Risks Associated with Personalization

Non-standard business involves tailoring financial products and services to meet individual clients' unique needs and circumstances. While personalization can effectively address clients' requirements, it also presents inherent risks. Firstly, personalized business tends to be inherently more intricate, demanding financial institutions possess specialized knowledge and skills to assess and control risks associated with these bespoke offerings accurately. Secondly, personalization can sometimes result in a lack of standardization in business processes, making risk management and supervision more challenging.

5.3 Liquidity Risk

Non-standard businesses often face poor market liquidity characterized by limited participants, small transaction sizes, and extended transaction cycles. This scarcity of market liquidity gives rise to two significant challenges: Firstly, it hinders investors' ability to buy or sell assets swiftly, consequently elevating investment risk due to the lack of prompt asset liquidation. Secondly, the dearth of market liquidity can contribute to heightened price volatility during transactions. This volatility complicates investors' efforts to accurately assess risk and value assets, potentially resulting in overestimating asset value and a lack of awareness regarding asset liquidity.

5.4 Risks Associated with Complex Transaction Structures

Non-standard business often involves intricate transaction structures, encompassing multiple participants and intricate layers of debt relationships. These complexities introduce a range of risks. Firstly, the intricate transaction structures can lead to an uneven distribution of transaction risk. A problem in one part of the structure can trigger a chain reaction of issues. Secondly, complex transaction structures complicate the assessment and management of risks. There is a higher likelihood of risks being underestimated or overlooked. Many products assume a seemingly simplified form when presented to ordinary investors through the financial institutions' and individuals' packaging. Ultimately, these products are placed in the hands of investors, who may encounter challenges in fully comprehending and managing the underlying complexities.

5.5 Risks Stemming from Information Asymmetry

Information asymmetry is prevalent within non-standard businesses, where participants possess varying information concerning the business and its associated risks. This imbalance in information can lead to one party gaining an unfair advantage in transactions, thereby increasing the risk for other participants. For instance, financial institutions often benefit from their expertise and information advantage, potentially gaining a disproportionate edge in transactions. Conversely, investors may be disadvantaged due to information asymmetry, exacerbated by marketing tactics. This asymmetrical information distribution can ultimately culminate in substantial losses for investors.


Insurance companies face a crucial challenge in their business processes concerning using investment funds. Successful investments can yield substantial profits for the enterprise, but they also carry the potential for investment failures and financial losses. Consequently, there is a compelling need to meticulously manage the risks associated with investment and formulate an effective capital utilization strategy.
The first step in this endeavor is identifying various risk factors, a vital task that safeguards corporate investments’ security. Notably, for insurance companies, most of their assets are insurance funds. These funds inherently bear the risk of liability to policyholders. When insured events occur, insurance companies are obligated to fulfill policy payouts. Therefore, effective risk management of the investment strategies employed for insurance funds becomes even more critical for the overall financial health of insurance companies.

The utilization of insurance funds presents significant opportunities and challenges. On one hand, China’s insurance market depth and density have not yet reached the global average, and the industry is experiencing rapid growth. This swift expansion in premiums bodes well for the utilization of insurance funds. On the other hand, amidst the backdrop of declining long-term interest rates, there is a scarcity of long-term, high-quality assets. This presents a quandary, as pursuing enhanced investment returns must navigate the delicate balance between asset soundness, safety, and qualification amid the prevailing downward trend.

As the pioneer in insurance fund risk theory, Carmer was the first to recognize the critical significance of studying the investment risk associated with insurance company funds for insurers’ asset allocation. Carmer underscored the need for insurance companies to closely monitor investment risks and reduce potential losses when contemplating increased investments. In a study conducted by Zhang (2013), a profound insight emerged when analyzing the shareholding preferences of insurance companies. Compared to other industries, the distinctive nature of insurance company operations underscores a heightened emphasis on safety and liquidity in their stock investments. Building upon the existing body of literature, the risk management of alternative investments, particularly within non-standard business models, can be approached from various facets[11-13].

6.1 Minimizing Funding Costs and Enhancing Premium Income Structure

The rapid advancement of technology in China has given rise to the emergence of insurtech, serving as a pivotal technological catalyst for the reform and evolution of the nation’s insurance industry. Insurance technology has proven instrumental in propelling the industry's growth at an accelerated pace across various aspects, including product pricing, marketing, claims processing, and customer service. Leveraging insurtech, insurance companies can effectively address challenges such as high operational costs and enhance their overall operational efficiency.

In recent years, agricultural insurance, vigorously promoted by the state, has emerged as a potential catalyst for insurance companies seeking to optimize their premium income structure. Financial authorities at all levels have continued to bolster agricultural insurance subsidies in support of the drive for agricultural industrialization. This concerted effort has led to a rapid upswing in agricultural premium income, accompanied by increased penetration and breadth of insurance coverage.

Moreover, the pilot integration of insurance technology in agricultural insurance holds promise and offers new avenues for developing this sector. Given these favorable circumstances, insurance companies can leverage the unique agricultural characteristics within their respective provinces. They can strategically expand their agricultural insurance operations by conducting comprehensive local assessments of agricultural insurance demand and engaging proactively with relevant government agencies. This strategic move aligns with improving the premium income structure and contributes to the broader agricultural development goals.

6.2 Strengthening Investment Research Capabilities and Proactive Management of Equity Investments

Quality equity investment projects have the potential to provide insurance companies with long-term and stable capital appreciation, aligning perfectly with the need for consistent, long-term
investment returns for insurance funds. Furthermore, in the aftermath of the financial crisis, Chinese enterprises experienced a rapid escalation in financial leverage due to loose monetary policies and stimulating fiscal measures. However, this heightened financial leverage poses a significant risk as the national economy struggles to sustain such high leverage levels. Recognizing this, it becomes evident that insurance funds are transitioning from debt-focused financial investments, including non-standard debt investments, towards equity-based holdings. This strategic shift away from debt-centric financial investments towards equity-based holdings aligns wisely with the broader economic development trend in the country.

Nevertheless, it is essential to acknowledge that equity investments carry a distinctly higher risk level than fixed-income debt investments. Regulators have introduced a series of stringent requirements for insurance companies engaging in equity investments. Therefore, insurance institutions must navigate a dual path as they strive to expand their presence in unlisted equity investments. On the one hand, insurance institutions must expedite the process of applying for equity investment qualifications to bolster their capacity in this area. On the other hand, insurance institutions must concurrently strengthen their investment research capabilities. This entails enriching their investment research teams, enhancing their investment departments, and fostering a deeper understanding and judgment of specific industries and the broader market.

Recently, the China Banking and Insurance Regulatory Commission (CBIRC) has taken steps to liberalize the investment capacity filing process. Instead of requiring CBIRC approval, insurance companies must file independently. However, this shift has a significant caveat: insurance companies must establish robust investment systems and assume full responsibility for investment risks. This strategic move compels insurance companies to enhance their investment capacity. Therefore, within this evolving regulatory landscape, it becomes paramount for insurance companies to focus on strengthening their investment research and risk management capabilities.

6.3 Adapting Investment Strategies: Transitioning from Non-Standard Debt Investments to Quantitative Hedging Products

Faced with the challenges of the 'asset drought' in the non-standard debt sector, insurance companies must swiftly recalibrate their investment strategies. This involves conducting a comprehensive market-wide search for assets, studying their distinctive characteristics, and actively seeking alternative investments to substitute non-standard debt. Upon closer examination of market products, quantitative hedge funds emerge as a promising candidate to serve as an alternative asset class to non-standard debt for insurance companies.

6.4 Proactive Exploration of REIT Investments for Enhanced Diversified Allocation

An analysis of foreign insurance asset allocation structures reveals that Real Estate Investment Trusts (REITs) constitute the primary investment focus for foreign insurance companies. Foreign REIT systems are characterized by their relative maturity and comprehensiveness. REIT investments offer a diversified investment vehicle, allowing for the direct purchase of REIT shares or indirect investments in the real estate sector. This approach not only maintains asset liquidity but also delivers higher investment returns.

Investing insurance funds in standardized products like public Real Estate Investment Trusts (REITs) offers a prudent approach that aligns with the safety, liquidity, and profitability criteria essential for managing insurance funds. This shift can be pivotal in optimizing the asset allocation structure, which is heavily skewed towards non-standard debt. By introducing pilot investment products and steering traditional debt assets and equity insurance funds towards public REITs, insurance companies can strike a balance that ensures insurance funds' security, liquidity, and
profitability. Such an adjustment is crucial for enhancing the insurance fund utilization landscape overall.

References