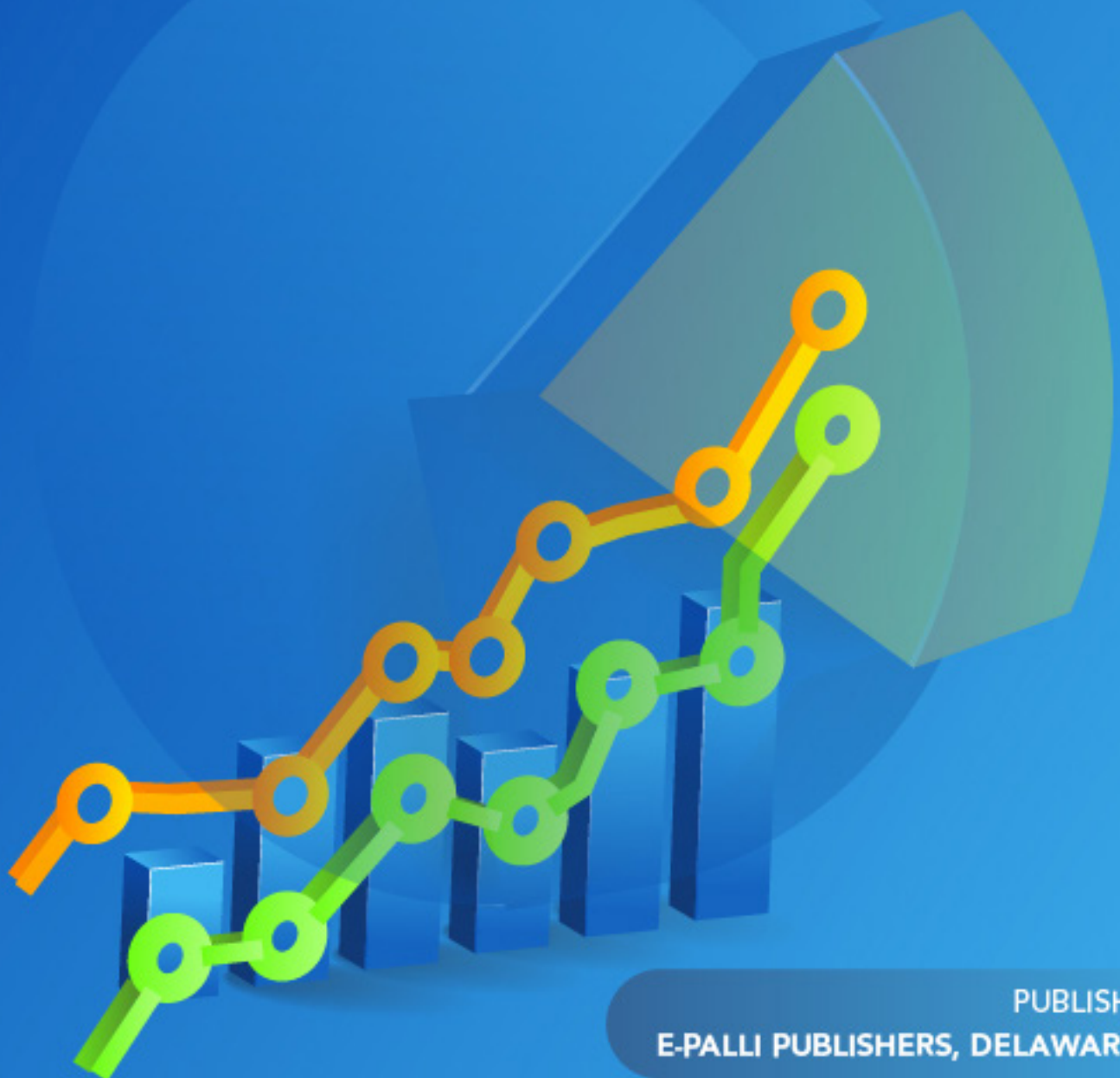




# American Journal of Applied Statistics and Economics (AJASE)

ISSN: 2992-927X (ONLINE)

VOLUME 5 ISSUE 1 (2026)



PUBLISHED BY  
E-PALLI PUBLISHERS, DELAWARE, USA

## Adverse Selection and Moral Hazards: Information Asymmetry as a Source of Market Failures in Insurance and Finance

Emmanuel Nana Oware Acquah\*

### Article Information

**Received:** September 09, 2025

**Accepted:** October 13, 2025

**Published:** January 21, 2026

### Keywords

*Adverse Selection, Affordable Care Act (ACA), Financial Markets, Health Insurance, Information Asymmetry, Market Failures, Moral Hazard*

### ABSTRACT

Adverse selection and moral hazard are two central manifestations of information asymmetry that distort the efficiency of insurance and financial markets. Adverse selection arises prior to contract formation when high-risk individuals disproportionately seek coverage or credit, crowding out low-risk participants and destabilizing risk pools. Conversely, moral hazard emerges after contracts are signed, as insured or financed parties engage in riskier or concealed behaviors such as excessive claims, strategic defaults, or reckless risk-taking. Using evidence from the health insurance market particularly before and after the enactment of the U.S. Affordable Care Act (ACA) and from patterns of loan default in financial markets, this paper demonstrates how information asymmetry contributes to systemic instability. The 2008 Global Financial Crisis exemplifies the destructive consequences of these dynamics, where poor screening and irresponsible lending magnified market failures. Consequently, policy interventions such as mandates, subsidies, deductibles, monitoring mechanisms, and regulatory reforms remain essential in promoting market stability, equity, and sustainability.

### INTRODUCTION

Efficient markets rely on the assumption of perfect information, where buyers and sellers make decisions based on complete and accurate data. In reality, however, this condition rarely holds. Information asymmetry, the situation in which one party in a transaction possesses superior information about risk, quality, or behavior, remains one of the most persistent sources of market inefficiency (Zweifel *et al.*, 2021). This imbalance encourages strategic behavior that compromises both fairness and efficiency, and in extreme cases, leads to total market collapse.

Two principal manifestations of information asymmetry are adverse selection and moral hazard. Adverse selection occurs before contracts are signed, where individuals with higher risk profiles are more inclined to seek insurance or credit, while lower-risk participants withdraw, resulting in an unsustainable risk pool (Martimort *et al.*, 2025). In contrast, moral hazard occurs after a transaction is completed, as insured or financed agents modify their behavior, taking excessive risks or neglecting precautionary measures, knowing that losses are partly or fully borne by others (Mardjono & Setyawan, 2025).

Both phenomena are particularly relevant in insurance and financial markets, which inherently depend on risk-sharing and trust. The 2008 Global Financial Crisis underscored how insufficient screening (adverse selection) and reckless risk-taking (moral hazard) can trigger systemic instability. Similarly, in the health insurance sector, balancing affordability with responsible behavior remains a central policy challenge, exemplified by the reforms introduced under the Affordable Care Act (ACA) in the United States.

This paper investigates how adverse selection and moral hazard contribute to market failures in insurance and financial systems. By synthesizing theoretical insights and empirical evidence, it highlights the mechanisms through which asymmetric information disrupts equilibrium and explores policy and contractual solutions designed to mitigate its effects.

### LITERATURE REVIEW

Manifestation of Asymmetric Information in Insurance and Financial Markets

#### Manifestations in Insurance Markets

Adverse selection represents a structural weakness in insurance markets, where high-risk individuals are more likely to purchase coverage than their low-risk counterparts. This is evident in health insurance, where people with chronic illnesses or pre-existing conditions are more inclined to seek insurance, while healthier individuals often opt out, increasing the average cost of coverage (Zweifel *et al.*, 2021). The outcome is a classic “market unravelling,” as rising premiums further discourage participation from low-risk individuals. Similarly, life insurance markets experience adverse selection when individuals with poor health or risky lifestyles purchase large policies, skewing the risk pool (Zhang *et al.*, 2021). Auto insurance faces comparable challenges as inexperienced or reckless drivers are more likely to buy comprehensive coverage, raising claim frequencies and costs.

Moral hazard, on the other hand, occurs post-contract, when the insured alters their behavior in ways that increase the probability or magnitude of claims. In health

<sup>1</sup> Department: Department of Economics, Youngstown State University, USA

\* Corresponding author's e-mail: [enacquah@student.ysu.edu](mailto:enacquah@student.ysu.edu)

insurance, for example, insured patients may overuse medical services or neglect preventive care, inflating healthcare costs. Likewise, fully covered drivers may exhibit careless driving habits, knowing they are shielded from financial consequences. Even life insurance may foster subtle moral hazards when policyholders neglect healthy living because their beneficiaries remain financially protected.

Empirical studies substantiate these challenges. Prior to the ACA, U.S. health insurers faced unstable risk pools as healthy individuals avoided coverage unless incentivized through subsidies or mandates (Ross, 2022). Similarly, insured drivers have been found to file more claims than uninsured ones a measurable indication of moral hazard. To address such issues, the ACA introduced individual mandates and premium subsidies, expanding participation and stabilizing risk pools (Zhang *et al.*, 2021).

In developing countries, microinsurance schemes face analogous risks: households most exposed to hazards are the first to enroll, while insured farmers may reduce preventive practices like crop diversification or irrigation investment. These examples underscore that while insurance facilitates risk-sharing, unchecked information asymmetry undermines both efficiency and equity.

### Manifestations in Financial Markets

Adverse selection also distorts credit markets, where lenders struggle to differentiate between high- and low-risk borrowers. Because borrowers possess better information about their repayment prospects, lenders raise interest rates to compensate for uncertainty. This inadvertently drives out low-risk borrowers, concentrating riskier borrowers in loan portfolios, a phenomenon known as credit rationing (Elomari, 2025). The result is inefficiency, as productive borrowers lose access to capital while speculative borrowers dominate.

Moral hazard arises after contracts are executed, when borrowers or financial institutions undertake excessive risks, knowing they are insulated from full consequences. The “too-big-to-fail” doctrine exemplifies this, as large financial institutions engage in risky lending under the expectation of government bailouts (Grewal, 2020; Aniemeke, 2024). At the household level, moral hazard manifests through debt forgiveness expectations that weaken repayment discipline.

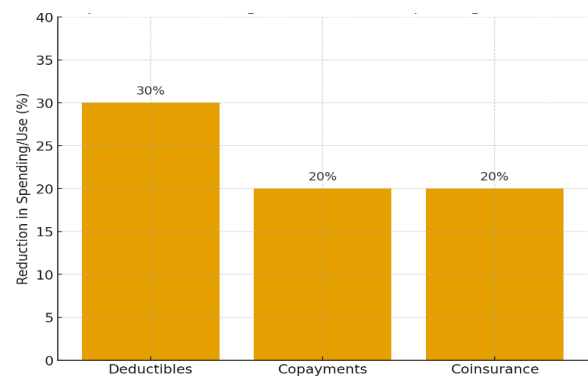
The 2008 Global Financial Crisis serves as a critical case study. Subprime mortgage lenders extended loans to unqualified borrowers, a moral hazard (Blake, 2022). The collapse of housing prices exposed these weaknesses, leading to defaults, bankruptcies, and a global recession. Compounding these failures, credit rating agencies, the supposed intermediaries of transparency, issued overly optimistic assessments of mortgage-backed securities, amplifying adverse selection (through mispriced risk) and moral hazard (by incentivizing risk concealment). This highlights the need for robust oversight, transparency, and accountability mechanisms to mitigate the destabilizing effects of asymmetric information in finance.

### Prevention of Adverse Selection and Moral Hazard Insurance Markets

Insurers combat adverse selection through risk classification and underwriting, relying on factors such as medical history, driving record, and lifestyle to design risk-based premiums (Pauly, 2024). Governments also employ regulatory mandates and subsidies, such as the ACA’s individual mandate, to broaden participation and stabilize risk pools (Grewal, 2020).

To mitigate moral hazard, insurers use contract design tools, such as deductibles, copayments, and coinsurance, to ensure that policyholders retain partial financial responsibility (Parra & Winter, 2024; Alsagoor, 2023). Empirical evidence, including the RAND Health Insurance Experiment, shows that cost-sharing mechanisms significantly reduce unnecessary healthcare utilization and encourage cautious behavior.

While these mechanisms promote responsible conduct, they also raise concerns about accessibility and fairness highlighting the delicate balance between efficiency and equity in risk-sharing markets.



**Figure 1:** Impact of Cost Sharing Tools on Medical Spending (RAND HIE)

Lastly, Moral hazard can be reduced through monitoring and incentive-based mechanisms. Health insurers reward policyholders for healthy behaviors, while auto insurers use telematics and usage-based premiums to encourage safe driving (Grewal, 2020). Similarly, discounts for preventive measures such as anti-theft systems align the interests of insurers and insureds. By combining behavioral incentives with technology, insurers effectively curb opportunistic behavior and promote responsible risk management.

### Prevention of Adverse Selection and Moral Hazards in Financial Markets

Information disclosure and transparency are essential in reducing adverse selection in financial markets. Borrowers should provide accurate and verifiable details about their financial status, investments, and creditworthiness to enable lenders to distinguish between high- and low-risk applicants (Salman, 2023). The use of credit bureaus, standardized reporting systems, and centralized databases

enhances this process. In emerging markets, digital credit scoring and mobile-based data analytics are increasingly used to assess repayment capacity where collateral is limited (Jung *et al.*, 2024). By improving transparency, lenders can reduce information asymmetry the root cause of adverse selection in credit markets.

Financial institutions also employ screening and signalling mechanisms to mitigate adverse selection. Screening involves credit history assessments, collateral requirements, and background verification, while signalling allows borrowers to demonstrate reliability through guarantees, co-signers, or favorable loan terms (Salman, 2023). Relationship banking further strengthens this process by enabling lenders to monitor client performance over time, ensuring credit is extended to trustworthy borrowers.

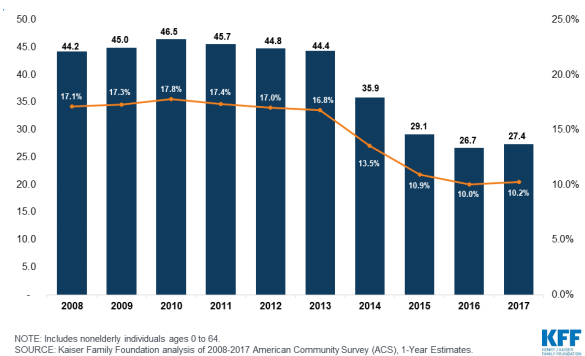
To counter moral hazard, lenders use contractual and monitoring mechanisms such as loan covenants, audits, and performance reviews. These measures restrict the misuse of borrowed funds and allow early intervention when borrowers engage in risky or speculative behavior particularly important in corporate finance where mismanagement can endanger creditors and shareholders. At the systemic level, regulation and oversight are crucial. Prudential measures such as capital adequacy requirements under the Basel Accords ensure that banks hold sufficient reserves against potential losses. Well-structured deposit insurance schemes can limit moral hazard by protecting small depositors while discouraging excessive risk-taking by large investors. Post-crisis reforms, including the Dodd-Frank Act in the U.S., imposed stricter controls on derivatives, rating agencies, and systemically important institutions to prevent a recurrence of excessive risk-taking (Jung *et al.*, 2024). Overall, addressing adverse selection and moral hazard requires a combination of information transparency, contractual discipline, and regulatory oversight to strengthen market stability and accountability.

## MATERIALS AND METHODS

### Data

The information asymmetry generated by adverse selection and moral hazard imposes significant constraints on insurance markets. This challenge is particularly evident in health insurance, where the imbalance between low-risk and high-risk participants often undermines the sustainability of risk pools. At the height of the pre-ACA uninsured surge, approximately 50.7 million Americans (16.7% of the population) lacked health insurance, a factor that created uneven risk pools with patients having elevated health risks overrepresented, forcing the insured population to pay higher premiums (Ercia, 2021). Later, by mid-decade, approximately 20 million Americans had obtained insurance under the individual markets. The Kaiser Family Foundation's statistics on the number of uninsured individuals from 2008 to 2017 provide a perfect example of how adverse selection in health insurance markets can lead to system instability

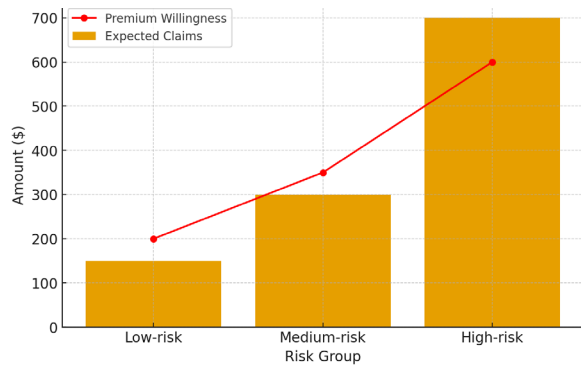
(Neiman *et al.*, 2021). Furthermore, the study emphasises the significance of policy responses in addressing information asymmetries. As Figure 2 indicates, the rate of uninsured among the nonelderly at the start of ACA period stood at about 17-18% (with an estimate of 46.5 million in 2010) which is a classic adverse selection cycle in which healthy people choose not to be covered, leaving the risk pools with a disproportionately high number of people at risk and pushing up the premiums. After the ACA was implemented in 2014, the number of uninsured individuals decreased significantly, to 35.9 million (13.5%) in 2014 and 26.7 million (10.0%) in 2016, respectively, representing a decrease of about 20 million people relative to the pre-ACA peak. The data are relevant because they quantitatively demonstrate how broadening the risk pool through universal mandates and subsidies can mitigate adverse selection by aligning incentives and reducing the cost burden on both insurers and insureds. Nevertheless, the slight increase to 27.4 million (10.2%) in 2017 indicates the potential forces at play in the market, especially with policy uncertainties and affordability issues leading to some healthier enrollees leaving the system, a factor that has adversely affected the balance of the risk pool.



**Figure 2:** Number of Uninsured and Uninsured Rate Among the Nonelderly Population, 2008-2017

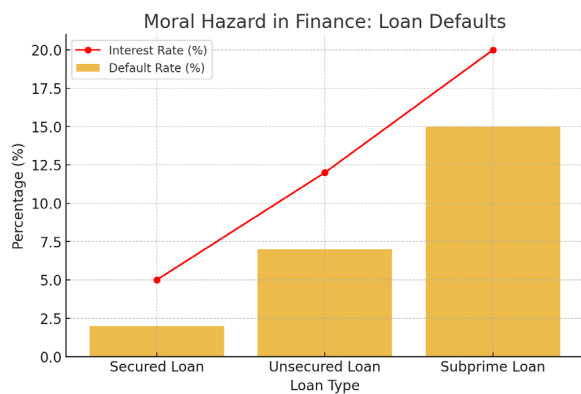
Regarding the relationship between information asymmetry, adverse selection, and moral hazard as sources of market failures in insurance, Figure 3 illustrates that, in the case of adverse selection, health insurance data show individuals in the high-risk group incur expected claims of \$700 but are only willing to pay premiums of \$600. In comparison, low-risk individuals expect claims of only \$150 and are willing to pay a premium of \$200. The result of this malalignment is a structural issue: since the premiums under the regime must be raised to compensate for the increased expected claims of higher-risk members, the participants will move out of the pool, leaving high-risk participants in the pool. The effect of this death spiral is a reduced risk pool and higher premiums. Empirical research has found that in unimposed-mandatory markets, as many as 1525% of the low-risk enrollees can exit the market when premiums increase by 1015%. The graphical evidence also well depicts the asymmetry between willingness to pay and the

anticipated claims, which further supports the fact that information asymmetry before contracting affects the stability of the market.



**Figure 3:** Adverse Selection in Health Insurance

The moral hazard chart also highlights the post-contract risks in finance. In fact, secured loans have a default rate of 2% and comparatively low interest rates of 5% whereas the default rates on subprime loans are as high as 15%, and the lenders charge interest rates of 20% to recover the increased risk (Figure 4). This implies that when borrowers receive funding, particularly in unsecured markets, they may engage in riskier financial practices or exhibit lax repayment behaviour, knowing that lenders ultimately absorb part of the losses. According to Acquatella and Marone (2025), moral hazards in health insurance are associated with patients becoming more productive users of healthcare services, as insurance coverage results in lower out-of-pocket charges.



**Figure 4:** Moral Hazard in Finance: Loan Defaults

## RESULTS AND DISCUSSIONS

The statistics provided by the Kaiser Family Foundation review of the American Community Survey (2008-2017) indicate that the number and percentage of uninsured nonelderly people in the United States dropped significantly. Between 2008 and 2013, the number of uninsured citizens did not change significantly, but it remained at approximately 44.2-46.5 million, with rates between 17% and 18%. Nevertheless, this has declined

drastically since the introduction of the Affordable Care Act (ACA), when the uninsured rate reduced to 35.9 million (13.5%) in 2014 and further to 29.1 million (10.9%) in 2015. The ACA has influenced coverage; the lowest uninsured rate was achieved in 2016 at 10.0% (26.7 million). The number of uninsured also rose slightly to 27.4 million (10.2 per cent) by 2017, due to policy insecurity and a lack of affordability. Overall, the trend demonstrates that the ACA has successfully reduced the number of uninsured individuals, but maintaining coverage retention is not easy.

**Table 1:** Shows the steady decline in the number and percentage of uninsured nonelderly Americans from 2008 to 2017.

Year	Uninsured (millions)	Uninsured (%)
2008	44.2	17.1
2009	45.0	17.3
2010	46.5	17.8
2011	45.7	17.4
2012	44.8	17.0
2013	44.4	16.8
2014	35.9	13.5
2015	29.1	10.9
2016	26.7	10.0
2017	27.4	10.2

The study reveals strong empirical evidence of adverse selection and moral hazard as core causes of inefficiency and instability in financial and insurance markets. Structural disparities between willingness to pay and expected claims demonstrate adverse selection: As Figure 2 indicates, high-risk individuals expected \$700 in claims but were willing to pay only \$600, while low-risk individuals expected \$150 but were willing to pay \$200. This imbalance triggers a “death spiral,” where low-risk participants exit the market, leaving riskier pools and escalating premiums. Experimental findings further show that in voluntary markets, up to 15–25% of low-risk enrollees withdrew when premiums rose by 10–15%. In finance, moral hazard emerges through borrower behavior secured loans with a 5% interest rate showed a 2% default rate, compared to 15% for subprime loans. Similarly, fully insured patients consumed 30–40% more medical services than those with cost-sharing plans. These findings highlight how hidden post-contract behaviors distort efficiency and elevate systemic risk.

The study distinguishes the two phenomena: adverse selection arises before contracting, mispricing risk and reducing participation, while moral hazard occurs after contracting, driving opportunistic behaviors such as defaults or inflated claims. Effective remedies differ mandates and subsidies mitigate adverse selection, whereas deductibles, co-payments, and monitoring counter moral hazard.

Historical evidence, notably from the 2008 Global Financial Crisis, underscores these dynamics. Poor screening led to excessive subprime lending (adverse selection), while risky institutional behavior under the expectation of bailouts reflected moral hazard. The resulting defaults and bank collapses demonstrate how information asymmetry destabilizes markets.

**Discussion**

**Policy Impact on Adverse Selection**

**The Impact of Policy Interventions on Adverse Selection in Health Insurance Markets**

The study’s findings provide quantitative and policy-based measures of how adverse selection, a type of information asymmetry, makes insurance markets unstable and predisposes them to market failure. The pre-ACA data, which showed that nearly 50.7 million people (16.7%) were uninsured, illustrate the traditional adverse selection issue: healthier members chose not to get covered, and risk pools became disproportionately filled with individuals at high risk, leading to premium increases (Figure 2). This reveals evidence of concealed information preceding the signing of contracts, thereby distorting participation and efficient risk sharing. The subsequent ACA reforms, which covered almost 20 million more Americans and lowered the uninsured rate to 10.0% in 2016 by creating a broader pool through mandates and subsidies, demonstrate that reducing the inefficiency of adverse selection by expanding the pool can restore a more stable market. Meanwhile, the slight rebound to 27.4 million uninsured in 2017 highlights the continuing information asymmetry, with healthier people leaving the system again due to the policy uncertainty and affordability pressures. In general, the evidence suggests that asymmetric information contributes to instability and inefficiency in insurance markets, and that targeted policy actions are essential in correcting such failures.

- Pre-ACA uninsured (2010): 50.7 million (16.7%)
- Lowest uninsured (2016): 26.7 million (10.0%)

Reduction in Percentage Reduction =  $24.0/50.7 \times 100 = 47.3\%$

Therefore, by quantifying the reduction in the number of uninsured between 50.7 million without ACA to 26.7 million in 2016, shows that the expansion of the risk pool due to mandates and subsidies fixed the problem of adverse selection, whereby during the absence of a policy, healthier individuals could choose not to take the insurance, and the insurance companies ended up with a disproportionately high-risk pool. This numerical decline highlights the policy as a direct solution to information asymmetry by enhancing risk-sharing, stabilising premiums, and minimising market failure. Meanwhile, the minimal recovery in 2017 highlights the weakness of these improvements, as policy uncertainty and affordability pressures allow adverse selection forces to reemerge. Therefore, the calculation serves as a tangible gauge of the ability of interventions to address

information asymmetry and reduce the inefficiencies underlying insurance market instability.

**The Impact of Adverse Selection on Risk Pool Imbalances in Insurance Markets**

The study findings are also highly pertinent because they give empirical evidence of how information asymmetry drives market failures in the insurance and finance sectors. As evident from the study, adverse selection occurs at the point of contract signing, where individuals have signals of their risk level that insurers or lenders cannot fully observe. This is well demonstrated by Figure 3, whereby it is evident that high-risk persons, whose claims were anticipated at \$700, were not disposed to pay more than \$600, and low-risk persons, whose claims should have been \$150, were not disposed to pay more than \$200. This imbalance results in a death spiral where low-risk individuals move out of the market, leaving a disproportionately high-risk pool, which in turn increases premiums further and causes the system to become unstable.

**Table 2:** Calculation

High-risk individuals	Low-risk individuals
Expected claims=\$ 700	Expected claims = \$150
Willingness to pay=\$200	Willingness to pay = \$200

**Calculation**

- High risk deficit:  $700-600=100$  (High-risk individuals underpay by \$100, meaning insurers face a shortfall).
- Low risk surplus:  $200-150=50$  (Low-risk individuals overpay by \$50, meaning insurers rely on them to stabilize the pool).

**Net imbalance**

If the market has an equal number of high-risk and low-risk individuals, insurers face:

$100-50=50$

A net \$50 loss per person in the pool.

Therefore, the evidence reveals a structural imbalance in the risk-sharing process, as high-risk individuals pay \$100 less than they should, while low-risk individuals pay \$50 more than they should. This imbalance drives out low-risk entrants, causing them to leave the pool, and the insurers are left with an overrepresented, expensive population, which in turn drives up premiums, further creating a textbook death spiral. These numerical pieces of evidence support the suggestion that pre-contracting information distorts pricing and participation, and therefore, the efficiency and stability of the insurance markets. Consequently, the computation provides an economic indicator of the extent to which adverse selection undermines the concept of risk pooling, underscoring the need for regulatory interventions to rectify the information asymmetry and market failure.

### Moral Hazard as a Driver of Inefficiency and Instability in Insurance and Financial Markets

The study reveals how moral hazard, a specific example of information asymmetry that arises after contracts have been signed, contributes directly to the inefficiency and structural instability of insurance and finance. The fact that secured loans at 5% interest had a low default rate of 2 percent, whereas subprime loans had a high default rate of 15 percent and had to pay 20 percent interest, demonstrates how consumers, who are not at risk of immediate loss, can take excessive risks that lenders cannot effectively oversee. This can be confirmed by the idea of latent activity that causes market failures. Similarly, in insurance, the results show that fully covered patients use 30-40 per cent of the medical services compared to those in cost-sharing plans, providing specific evidence that when people are not required to pay part of the cost, they tend to abuse benefits and increase the system's cost (Figure 4). The combination of these statistics highlights the role of moral hazard in enhancing inefficiency through incentive distortions, compromising the role of risk-sharing in these processes, and making systems more vulnerable to critical risks, which is the core of your interest in adverse selection and moral hazard as expressions of information asymmetry that fuel them.

#### Calculation

- Secured loan: Default rate = 2%, Interest rate = 5%
- Subprime loan: Default rate = 15%, Interest rate = 20%

Difference in default rate:  $15\% - 2\% = 13\%$

Difference in interest rate:  $20\% - 5\% = 15\%$

The 13-point default gap indicates a disproportionately greater risk for subprime borrowers, who were often not adequately screened due to concealed information an instance of adverse selection. Meanwhile, the 15-point rise in interest rates indicates that lenders are reacting by passing these risks on to borrowers, which may drive them to behave recklessly again, and reflects the concept of moral hazard. These dynamics collectively underscore the role of information asymmetry (both before and after contracting) in introducing instability, exorbitant costs, and systemic market failure a process that is also observed in insurance markets.

#### CONCLUSION

The efficiency and stability of insurance and financial markets are primarily undermined by adverse selection and moral hazard, both stemming from information asymmetry that distorts incentives before and after contracts. In insurance, adverse selection drives healthy individuals out of risk pools, while moral hazard raises costs through excessive claims and risky behavior. In finance, poor screening allows risky borrowers access to credit, and weak oversight encourages reckless actions under bailout expectations. The 2008 Global Financial Crisis exemplifies how these unchecked forces can trigger systemic collapse. Addressing these failures requires

balanced policies mandates, subsidies, deductibles, transparency, and regulation that align incentives without restricting access. Ultimately, managing information asymmetry is essential for market integrity, financial stability, and long-term sustainability

#### REFERENCES

- Acquatella, A., & Marone, V. (2025). *The risk protection value of moral hazard* (No. w34156). National Bureau of Economic Research. <https://www.nber.org/papers/w34156>
- Alsagoor, T. M. (2023). The impact of drug pricing and insurance coverage on medication adherence in Saudi. *American Journal of Financial Technology and Innovation*, 1(1). <https://doi.org/10.54536/ajfti.v1i1.2033>
- Aniemeke, E. H. (2024). Competition, moral hazard and the stability of banks in Nigeria. *American Journal of Economics and Business Innovation*, 3(2), 85–93. <https://journals.e-palli.com/home/index.php/ajebi/article/download/2675/1409>
- Baumgartner, J., Collins, S., Radley, D., & Hayes, S. (2020). How the Affordable Care Act (ACA) has narrowed racial and ethnic disparities in insurance coverage and access to health care, 2013–18. *Health Services Research*, 55, 56–57. <https://onlinelibrary.wiley.com/doi/abs/10.1111/1475-6773.13406>
- Blake, D. (2022). The great game will never end: Why the global financial crisis is bound to be repeated. *Journal of Risk and Financial Management*, 15(6), 245. <https://www.mdpi.com/1911-8074/15/6/245>
- Elomari, R. (2025). The long-term relationship between insurance customers and agents: The importance of full disclosure for optimal coverage. *American Journal of Economics and Business Innovation*, 4(1), 11–19. <https://doi.org/10.54536/ajebi.v4i1.3095>
- Ercia, A. (2021). The impact of the Affordable Care Act on patient coverage and access to care: Perspectives from FQHC administrators in Arizona, California, and Texas. *BMC Health Services Research*, 21(1), 920. <https://link.springer.com/article/10.1186/s12913-021-06961-9>
- Grewal, S. (2020). *Struggling amidst plenty: A layperson's guide to our awful monetary system, why it's the root cause of inequality, debt, and "too big to fail," & the little-known way to fix it*. Subir Grewal.
- Jung, H., Kim, C., & Lim, S. (2024). Financial sustainability of social insurance: The case of Korean workers' compensation insurance and possibility of triple moral hazard. *Asia-Pacific Journal of Risk and Insurance*, 18(2), 157–174. <https://www.degruyterbrill.com/document/doi/10.1515/apjri-2024-0029/html>
- Mardjono, A., & Setyawan, I. R. (2025). Moral hazard, adverse selection, and capital structure in fintech microfinance in Indonesia. *Journal of Posthumanism*, 5(3), 684–691. <https://www.cceol.com/search/article-detail?id=1353970>
- Martimort, D., Poudou, J. C., & Thomas, L. (2025). *Optimal contracts under moral hazard, adverse selection, and*

- limited liability*. <https://publications.ut-capitole.fr/id/eprint/50641/>
- Neiman, P. U., Tsai, T. C., Bergmark, R. W., Ibrahim, A., Nathan, H., & Scott, J. W. (2021). The Affordable Care Act at 10 years: Evaluating the evidence and navigating an uncertain future. *Journal of Surgical Research*, 263, 102–109. <https://www.sciencedirect.com/science/article/abs/pii/S0022480421000160>
- Parra, Á., & Winter, R. A. (2024). Optimal insurance contracts under moral hazard. In *Handbook of insurance*. Volume II (pp. 129–164). Springer. [https://link.springer.com/chapter/10.1007/978-3-031-69674-9\\_6](https://link.springer.com/chapter/10.1007/978-3-031-69674-9_6)
- Pauly, M. V. (2024). Moral hazard and adverse selection in insurance markets: Four recent books. *International Journal of the Economics of Business*, 31(3), 255–270. <https://www.tandfonline.com/doi/abs/10.1080/13571516.2024.2343172>
- Ross, P. (2022). The Affordable Care Act: Moral hazard, adverse selection, challenges, alternative proposals, and amendments in health insurance law. *Nebraska Law Review Bulletin*, 1. <https://heinonline.org/HOL/LandingPage?handle=hein.journals/nelrvbu2022&div=9&id=&page=>
- Salman, K. R. (2023). Exploring moral hazard and adverse selection in profit sharing contract. *International Journal of Professional Business Review*, 8(3), 1–16. <https://eprints.perbanas.ac.id/10187/>
- Zhang, X., Chen, Y., & Yao, Y. (2021). Dynamic information asymmetry in micro health insurance: Implications for sustainability. *The Geneva Papers on Risk and Insurance – Issues and Practice*, 46(3), 468–507. <https://link.springer.com/article/10.1057/s41288-020-00200-8>
- Zweifel, P., Eisen, R., & Eckles, D. L. (2021). Insurance markets and asymmetric information. In *Insurance economics* (pp. 315–381). Springer International Publishing. [https://link.springer.com/chapter/10.1007/978-3-030-80390-2\\_8](https://link.springer.com/chapter/10.1007/978-3-030-80390-2_8)