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Book Review

Loss Coverage: Why Insurance Works Better With Some Adverse Selection, by Guy Thomas, 2017, Cambridge, UK: Cambridge University Press, 274 pages, ISBN: 978-1-107-49590-6 (Paperback).

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Loss Coverage: Why Insurance Works Better With Some Adverse Selection provides an interesting critique of the orthodox views many insurance academics and industry professionals have regarding the "problem" of adverse selection. Guy Thomas opens by asserting that rather than being a pervasively severe issue always to be avoided or discouraged, some degree of adverse selection in insurance is not only desirable but necessary for greater market efficiency. This idea harkens back to early work of Nobel Laureate (1992) Gary Becker, who essentially proposed similar insight into moral hazard using the notion that the optimal amount of "crime" is nonzero. Thomas goes on to effectively incorporate both verbal stories and numerical examples throughout the book, including exaggerated examples from HIV and genetic testing, as well as gender- and race-based insurance pricing.

The second section presents the basic theoretical, mathematical and graphical underpinnings of the book pertaining to the relation between adverse selection, loss coverage, and demand elasticities, even without the simplifying assumption of zero moral hazard. Thomas demonstrates probabilistic loss coverage and social welfare are both enhanced through some degree of adverse selection, whether from a public policy perspective or an insurer premium maximization with proportional profit-loading perspective. Thomas asserts loss coverage (based on observable claims) is generally preferable to social welfare (which requires unobservable utilities) as the best measure to simplify, clarify, and better evaluate policy questions and outcomes. Further, "weak" adverse selection is necessary to maximize loss coverage from a public policy perspective. The key role that separation (and its complement: inclusivity) plays in binary- and multi-group risk classification schemes is intuitively likened to maintaining the traditional balance between statistical power and Type II error.

The third section of the book examines various aspects of risk classification needed to induce some degree of (weak) adverse selection, beginning with why a particular

method may lead to suboptimal loss coverage. Thomas delineates two broad classes of objections to risk classification schemes that lead to suboptimal loss coverage: (1) where either too much or too little pooling of dissimilar risks occurs (i.e., "insufficient inclusivity") and (2) where pooling is sufficiently satisfactory, but the underlying scheme reasonably may be challenged or regulated on various ethical, technical, and/or practical grounds (i.e., "misguided methods"). Thomas also explores several prevalent insurance myths, breaking them into two nonmutually exclusive, general types: (1) "genuine misconceptions" (e.g., due to naïve cynicism or actuarial paranoia) and (2) "strategic misconceptions" (e.g., "cartoon" exaggeration of some positive/negative aspect, "barricades" that defend industry interests, or a "signal" of some virtuous situation).

An exploration of available empirical evidence on adverse selection, or the more usual lack thereof, also is provided in this section. Thomas contends most empirical evidence of adverse selection, if/when found, is typically quite weak, and is most commonly only "informational" in nature (i.e., due to some asymmetric advantage by consumers) rather than the more robust "competitive" case (i.e., among insurers seeking to differentiate themselves), and very little evidence has been found to support the worst case "adverse selection [death] spiral" (i.e., leading to complete market collapse). "Advantageous selection" (i.e., "wrong sign" coverage and loss correlation) also occasionally is found, though usually explainable with an additional variable for financial risk aversion.

Thomas also exposes myths of insurance economics, including the Rothschild–Stiglitz (1976), Miyazaki (1977), Wilson (1977), Spence (1978), and related classic equilibrium model extensions, that have been highly influential on theory and frequently applied in policy recommendations, despite being notoriously unreflective of actual real-world markets. Thomas refutes numerous myths, including: adverse selection always implies "efficiency loss," a small high-risk group poses big problems, deductibles make good screening devices, insurance for low risks is rationed, coverage for high risks is never rationed, and high and low risks differing only in risk must share uniform other endowments. Thomas also debunks several biases relating to asymmetries of information and behavior, as well as the common notion that any transfer from low to high risks through taxation or benefits is always superior to bans on risk classification schemes.

The final section of the book provides various suggestions for public policymakers, as well as economists and actuaries, to better implement risk classification schemes. Thomas effectively argues that policies justified by orthodox adverse selection arguments often disproportionately impact the sick, poor, or otherwise relatively disadvantaged, while policies based on exaggerated arguments may even be cruel or regressive. Thomas then offers an insightful range of risk classification proposals to consider that can more equitably balance loss coverage maximization versus the protection of individuals and freedom of choice in public policy outcomes.

In summary, *Loss Coverage* offers policymakers, academics, professionals, students, and other interested parties useful insight into the "problem" of adverse selection. Thomas employs simple and timely real-world examples to make the concepts of adverse selection, loss coverage, and risk classification more understandable and

relevant for policy decisions, offering a path toward mitigating concerns over unfair discrimination while increasing insurance market efficiency.

References

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