BOOK REVIEW

When Insurers Go Bust: An Economic Analysis of the Role and Design of Prudential Regulation, by Guillaume Plantin and Jean Charles Rochet, 2007, Princeton University Press, 101 pages

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This book contributes to the ongoing discussion regarding regulation and the role of prudential authorities in the insurance marketplace. Guillaume Plantin and Jean Charles Rochet do a remarkable job at exposing recommendations and criticizing the current prudential European and U.S. systems. This book treats the topic in a very elegant and succinct way. It must be read by regulators, practitioners, academics, and actuaries who are involved in the decision process of designing insurance prudential regulation.

Plantin and Rochet bring a new economic perspective to prudential regulation. The regulatory system is thought of as a whole, when in fact it is often built on ancestral heterogeneous actuarial practice. Their study is extremely relevant in the current economic context. For instance, in response to the successful European implementation of global banking regulation on capital adequacy that is known as Basel II, the current priorities of European insurance regulators are to introduce similar new accounting standards for the insurance sector (Solvency II), prompting considerable international debate. The U.S. system can also benefit from the discussions in this book, since the insurance industry is currently regulated at the state level by 56 different regulatory bodies, but recent legislation has been introduced to increase harmonization toward a single insurance market regulator at the federal level (S. 40: National Insurance Act of 2007 at the 110th Congress).

In this book, the authors share their views on how to design efficient prudential supervision that protects policyholders who are too dispersed to effectively monitor insurers. Their formal recommendations (Chapter 6) are illustrated by lessons drawn from four case studies of failed insurance companies that are detailed in Chapter 2. Their approach is fairly general. They discuss the fundamental economic reasons for prudential regulation rather than concentrating on the technical definition of prudential actuarial ratios. The book contains nine chapters. A brief synopsis of each chapter follows.

A short introduction is provided in Chapter 1, where the role of the regulator is developed. Regulators can intervene in the insurance market by imposing constraints on tariffs, entry, and mergers or acquisitions and by prudential regulation. Although prudential regulation is associated with the regulation of financial institutions, the authors insist that it has to be specific to the insurance sector.

Chapter 2 plays a key role in this book. In this chapter, four recent cases of financially distressed insurers are analyzed: Independent Insurance Company Limited (a young British company funded in 1987, bankrupted in 2001), Groupe des Assurances Nationales (a well-established French company acquired by Groupama in 1998), Equitable Life (a British company founded in 1762 that had serious solvency issues around 1999), Europavie (a young French company created in 1987 and declared bankrupt in 1997). Each case is used to draw important lessons, which are briefly summarized below.

Independent was selling standard insurance products and was granted the underwriter of the year award in 1998. Its failure in 2001 illustrates the inversion of the production cycle and the lack of an efficient supervisory system. GAN was a stateowned company. It eventually became a financial conglomerate. Its failure is due to strong conflicts of interests between shareholders, managers, and regulators; the absence of a forceful regulator; and the opacity of financial conglomerates compared to focused companies. Around 2001, Equitable failed due to options embedded in pension annuities where mortality risk and financial risk were underestimated and not hedged. Europavie had been taken over by a diversified conglomerate Thinet in 1994. It was running business in several European countries. Its failure came from inefficient cooperation between the German and the French regulators and from the opacity of a conglomerate. Chapter 2 ends by observing that in each of the four cases, an unexpected shock on the assets or liabilities suddenly decreased the net wealth of the company, and the decisions made by managers after the shock adversely affected the interests of the policyholders. Plantin and Rochet point out two reasons: the "inversion of the production cycle" and the "absence of a tough, sophisticated claimholder." They explain that the role of prudential regulation is to deal with these two important factors.

Chapter 3 is entitled "The State of the Art in Prudential Regulation." In this chapter, the authors explain in a nontechnical way what European and American actuaries and regulators do in practice to assess risks, particularly focusing on their analysis of the probability of ruin.

Chapters 4 and 5 provide a theoretical approach that explains how prudential regulation can be seen as a substitute for governance. Chapter 4 explains the particularities of the insurance sector: the inversion of the production cycle, the capital structure, and the agency conflicts of insurance companies. In this chapter, the authors also make an illuminating comparison between the deductible in an insurance contract and the capital requirement of an insurance company. An interesting discussion on the multiple roles of deductibles in insurance contracts follows. Chapter 5 is built upon Dewatripont and Tirole (1994). It provides justification for the existence of a prudential authority that assumes the role of a necessary "tough" claimholder to protect dispersed policyholders. Some related difficulties of prudential regulation are also discussed (e.g., why aiming at zero failure is unrealistic and too costly).

In Chapter 6, the authors outline their policy recommendations. This chapter is consistent with the two previous chapters and draws lessons from the four cases of financially distressed companies examined in Chapter 2. Briefly, the authors' recommendations for a sound system of regulation of insurance companies are as

follows. First, prudential ratios should be simple and balanced: the authors point out that the current U.S. risk-based capital standard may be too complicated whereas the European solvency margin is oversimplified. A double-trigger regulation is then proposed: one low threshold to protect shareholders from excessive interventionism from prudential regulation and one high threshold to grant the rights to the regulator, a tough claimholder. After the second threshold is hit, the only goal of regulators should be the recovery of current policyholders' outstanding claims without looking at other agents' interests (shareholders, company's future business opportunities). The importance of having an independent organism is underlined in order to avoid adverse incentives and to fully protect policyholders. A guarantee fund set up and run by the industry is also necessary. They similarly insist on the transparency and the public disclosure of reports common to the whole industry. A last recommendation of Chapter 6 is that the scope of regulators should be restricted to primary insurance companies. Chapter 7 analyzes more deeply this last recommendation by investigating the reinsurance market. Reinsurance supplements the role of regulators since it is an industry with a high level of risk management.

Chapter 8 is entitled "How does insurance regulation fit within other financial regulations?" This chapter is particularly important in explaining how to regulate financial conglomerates. An example shows the importance of correlation in the assessment of the risks of a conglomerate. Then, the authors propose a "double-trigger" structure, where the first trigger is tough and triggered if one of the components of the group or the consolidated ratio of the group does not satisfy regulation. The liquidation process and the transfer of the control rights to the regulator are triggered by a second threshold, a standard that should be more lenient for a group than for a single company. The remaining part of Chapter 8 addresses the importance of more stringent regulation of liquidity risk and systemic risk in the insurance industry than in banking. Prudential regulation of a bank and an insurance company must be different.

Chapter 9 concludes with an analysis of how prudential authorities have a role "as a substitute for corporate governance." The authors firmly insist on the role of the regulator as a tough claimholder to protect the current policyholders. They are also firmly convinced that "as long as an insurance company does well, it is optimal to let the top management and shareholders run the company without constraints." An example of how Solvency II might enforce inefficient management of insurance companies can be found in a recent study by Gollier (2008).

In summary, this book offers an enjoyable economic perspective to the main issues of prudential regulation. It should serve as a bridge between actuaries and regulators to design the fundamental pillars of a regulation system. Finally, this book contributes to the current world debate of how to regulate international financial conglomerates and how to deal with systemic risk.

REFERENCES

Dewatripont, M., and J. Tirole, 1994. The Prudential Regulation of Banks (Cambridge, MA: MIT Press).

Gollier, C., 2008, Assets Relative Risk for Long-Term Investors, Life & Pensions, 1.