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'Too Interconnected to Fail'? Regulating Crucial Utilities

Failure of systemically important utilities would be accompanied by significant social costs. How, then, can such infrastructures best be regulated while avoiding implicit bailout guarantees in the process?

As a consequence of the most recent financial crisis special regulations were adopted for financial institutions for which any interruption of service would entail large social costs. Authorities have also recognized that certain financial infrastructures—such as securities and derivatives exchanges, large-value payment systems, and clearinghouses—are vital for our economies. Their closure would entail significant disruption of the normal functioning of the financial system.

"Vital for our economies, certain financial infrastructures can be viewed as 'Too Interconnected to Fail'."

Such financial infrastructures do not fall into the well-known category of Too-Big-To-Fail banks—simply because they are not banks, and are not big (in terms of balance sheets and income). However, they can be viewed as "Too Interconnected to Fail", and may therefore have systemic importance. Thus, US regulators have coined a new acronym for these institutions, referring to them as SIFMUs, or systemically important financial market utilities.

The term *utility* usually refers to private firms that maintain infrastructure for a public service, such as electricity generators or distribution networks for electricity, natural gas, or water. Utilities are typically monitored by public authorities, which are supposed to ensure that the utilities do not exploit their market power by charging excessive prices, but also that these physical infrastructures are correctly maintained. Classical utilities are usually considered "safe", from both the investor's and the consumer's perspective. They often benefit from the implicit guarantee of the government should they encounter financial difficulties.

"Classical utilities are usually considered a safe investment. Recent scandals have, however, altered this perception."

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The full paper can be found at http://bit.ly/29qKiuz.

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They are also typically regarded by their shareholders as a safe investment. Several recent scandals have, however, altered this perception. California's rolling blackouts in 2000–01 showed that utilities can fail in spectacular ways. Not only can they go bankrupt, as in the case of Pacific Gas and Electric, power can stop flowing to users altogether. Simultaneously, Enron's downfall exposed the speculative activities at the source of both the company's failure and the Californian crisis. And these events have not been unique: the 2003 American Northeast blackout affected an estimated 10 million people in Ontario and 45 million in eight US states. Its origin has been attributed to trees, which had not been pruned, interfering with the transmission lines. In 2009, a power line fell to the ground in Kilmore East (Victoria, Australia), starting a fire that killed 119 people. The ensuing settlement cost AUD 500 million; the transmission line had fallen because of a faulty conductor that lacked a protective cap costing 10 dollars.

"Public authorities could reduce social costs by introducing minimal equity requirements for risky utilities."

SFI's Jean-Charles Rochet, in collaboration with Guillaume Roger, has developed a theory of the regulation of such risky utilities, defining them as any private firm that manages an infrastructure for a public service and that may be tempted to engage in excessively risky activities, such as reducing maintenance expenditure (at the risk of provoking a system breakdown) or engaging in speculative activities (at the risk of incurring massive losses that the firm cannot bear). The utilities addressed include financial utilities, such as exchanges, clearinghouses, or payment systems, as well as standard utilities, such as electricity transmission networks. The authors focus specifically on the survival risk of these firms, the closure of which would generate very large externalities.

The authors show that, on top of a direct monitoring of the risk management procedures of these risky utilities, public authorities could reduce social costs by introducing minimal equity requirements. These would guarantee that the shareholders of the utility maintain enough at stake to not engage in excessive risk taking. Importantly, public authorities should implement a strict restructuring rule that is triggered every time such capital requirements are violated.

"The theory's resolution mechanism differs considerably from a bailout."

The equity requirement here thus has a quite different role than the "buffer against losses" often advocated in the banking regulation literature. Instead of absorbing losses, the authors' proposed capital requirement is necessary to prompt early corrective action by public authorities. The theory's resolution mechanism is termination and sale to a new shareholder. This differs considerably from a bailout: termination occurs not because of financial distress but to guarantee that shareholders enforce adequate risk management procedures. Avoiding regulatory forbearance is thus of primary importance in the case of risky utilities.

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