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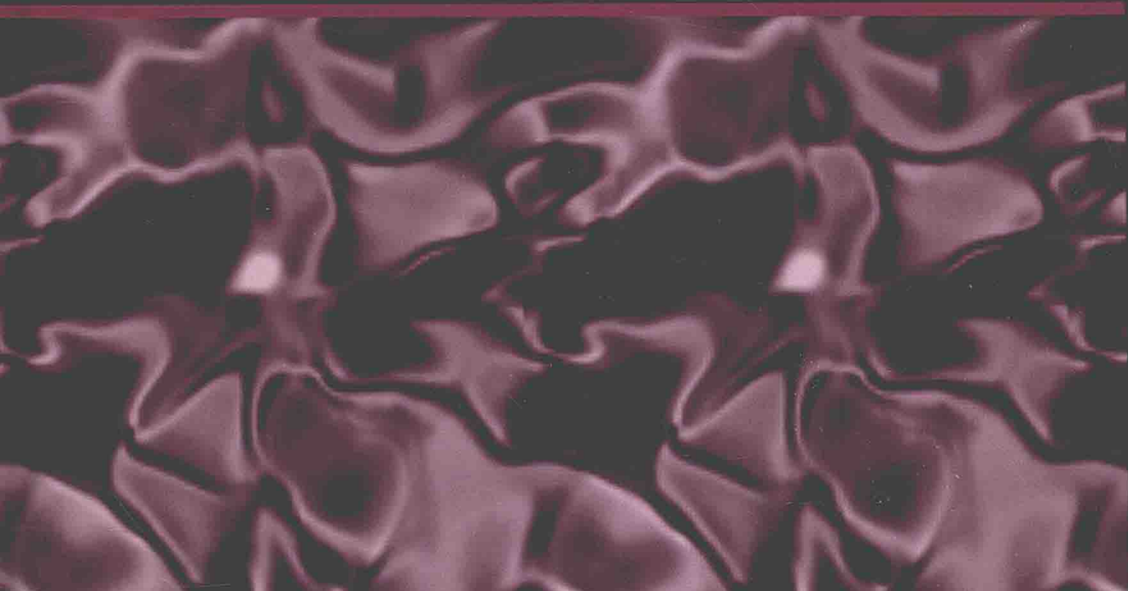
VOLUME II

Edited by **Geoffrey P. Miller**



ECONOMIC APPROACHES TO LAW 48

Economics of Financial Law
Volume II

Edited by

Geoffrey P. Miller

Stuyvesant Comfort Professor of Law
New York University Law School, USA

ECONOMIC APPROACHES TO LAW

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Volume II

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Contents

Part I
Financial Crises

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[1]
First Fireside Chat, Delivered on 12th March 1933

Franklin D. Roosevelt

I want to talk for a few minutes with the people of the United States about banking—with the comparatively few who understand the mechanics of banking but more particularly with the overwhelming majority who use banks for the making of deposits and the drawing of checks. I want to tell you what has been done in the last few days, why it was done, and what the next steps are going to be. I recognize that the many proclamations from State capitols and from Washington, the legislation, the Treasury regulations, etc., couched for the most part in banking and legal terms, should be explained for the benefit of the average citizen. I owe this in particular because of the fortitude and good temper with which everybody has accepted the inconvenience and hardships of the banking holiday. I know that when you understand what we in Washington have been about I shall continue to have your cooperation as fully as I have had your sympathy and help during the past week.

First of all, let me state the simple fact that when you deposit money in a bank the bank does not put the money into a safe deposit vault. It invests your money in many different forms of credit—bonds, commercial paper, mortgages and many other kinds of loans. In other words, the bank puts your money to work to keep the wheels of industry and of agriculture turning around. A comparatively small part of the money you put into the bank is kept in currency—an amount which in normal times is wholly sufficient to cover the cash needs of the average citizen. In other words, the total amount of all the currency in the country is only a small fraction of the total deposits in all of the banks.

What, then, happened during the last few days of February and the first few days of March? Because of undermined confidence on the part of the public, there was a general rush by a large portion of our population to turn bank deposits into currency or gold—a rush so great that the soundest banks could not get enough currency to meet the demand. The reason for this was that on the spur of the moment it was, of course, impossible to sell perfectly sound assets of a bank and convert them into cash except at panic prices far below their real value.

By the afternoon of March 3d[1] scarcely a bank in the country was open to do business. Proclamations temporarily closing them in whole or in part had been issued by the Governors in almost all the States.

It was then that I issued the proclamation providing for the nationwide bank holiday, and this was the first step in the Government's reconstruction of our financial and economic fabric.

The second step was the legislation promptly and patriotically passed by the Congress confirming my proclamation and broadening my powers so that it became possible in view of the requirement of time to extend the holiday and lift the ban of that holiday gradually. This law also gave authority to develop a program of rehabilitation of our banking facilities. I want to tell our citizens in every part of the Nation that the national Congress—Republicans and Democrats alike—showed by this action a devotion to public welfare and a realization of the emergency and the necessity for speed that it is difficult to match in our history.

The third stage has been the series of regulations permitting the banks to continue their functions to take care of the distribution of food and household necessities and the payment of payrolls.

This bank holiday, while resulting in many cases in great inconvenience, is affording us the opportunity to supply the currency necessary to meet the situation. No sound bank is a dollar worse off than it was when it closed its doors last Monday. Neither is any bank which may turn out not to be in a position for immediate opening. The new law allows the twelve Federal Reserve Banks to issue additional currency on good assets and thus the banks which reopen will be able to meet every legitimate call. The new currency is being sent out by the Bureau of Engraving and Printing in large volume to every part of the country. It is sound currency because it is backed by actual, good assets.

A question you will ask is this: why are all the banks not to be reopened at the same time? The answer is simple. Your Government does not intend that the history of the past few years shall be repeated. We do not want and will not have another epidemic of bank failures.

As a result, we start tomorrow, Monday, with the opening of banks in the twelve Federal Reserve Bank cities—those banks which on first examination by the Treasury have already been found to be all right. This will be followed on Tuesday by the resumption of all their functions by banks already found to be sound in cities where there are recognized clearing houses. That means about 250 cities of the United States.

On Wednesday and succeeding days banks in smaller places all through the country will resume business, subject, of course, to the Government's physical ability to complete its survey. It is necessary that the reopening of banks be extended over a period in order to permit the banks to make applications for necessary loans, to obtain currency needed to meet their requirements and to enable the Government to make common sense checkups.

Let me make it clear to you that if your bank does not open the first day you are by no means justified in believing that it will not open. A bank that opens on one of the subsequent days is in exactly the same status as the bank that opens tomorrow.

I know that many people are worrying about State banks not members of the Federal Reserve System. These banks can and will receive assistance from member banks and from the Reconstruction Finance Corporation. These State banks are following the same course as the National banks except that they get their licenses to resume business from the State authorities, and these authorities have been asked by the Secretary of the Treasury to permit their good banks to open up on the same schedule as the national banks. I am confident that the State Banking Departments will be as careful as the national Government in the policy relating to the opening of banks and will follow the same broad policy.

It is possible that when the banks resume a very few people who have not recovered from their fear may again begin withdrawals. Let me make it clear that the banks will take care of all needs—and it is my belief that hoarding during the past week has become an exceedingly unfashionable pastime. It needs no prophet to tell you that when the people find that they can get their money—that they can get it when they want it for all legitimate purposes—the phantom of fear will soon be laid. People will again be glad to have their money where it will be safely taken care of and where they can use it conveniently at any time. I can assure you that it is safer to keep your money in a reopened bank than under the mattress.

The success of our whole great national program depends, of course, upon the cooperation of the public—on its intelligent support and use of a reliable system.

Remember that the essential accomplishment of the new legislation is that it makes it possible for banks more readily to convert their assets into cash than was the case before. More liberal provision has been made for banks to borrow on these assets at the Reserve Banks and more liberal provision has also been made for issuing currency on the security of these good assets. This currency is not fiat currency. It is issued only on adequate security, and every good bank has an abundance of such security.

One more point before I close. There will be, of course, some banks unable to reopen without being reorganized. The new law allows the Government to assist in making these reorganizations quickly and effectively and even allows the Government to subscribe to at least a part of new capital which may be required.

I hope you can see from this elemental recital of what your Government is doing that there is nothing complex, or radical, in the process.

We had a bad banking situation. Some of our bankers had shown themselves either incompetent or dishonest in their handling of the people's funds. They had used the money entrusted to them in speculations and unwise loans. This was, of course, not true in the vast majority of our banks, but it was true in enough of them to shock the people for a time into a sense of insecurity and to put them into a frame of mind where they did not differentiate, but seemed to assume that the acts of a comparative few had tainted them all. It was the Government's job to straighten out this situation and do it as quickly as possible. And the job is being performed.

I do not promise you that every bank will be reopened or that individual losses will not be suffered, but there will be no losses that possibly could be avoided; and there would have been more and greater losses had we continued to drift. I can even promise you salvation for some at least of the sorely pressed banks. We shall be engaged not merely in reopening sound banks but in the creation of sound banks through reorganization.

It has been wonderful to me to catch the note of confidence from all over the country. I can never be sufficiently grateful to the people for the loyal support they have given me in their acceptance of the judgment that has dictated our course, even though all our processes may not have seemed clear to them.

After all, there is an element in the readjustment of our financial system more important than currency, more important than gold, and that is the confidence of the people. Confidence and courage are the essentials of success in carrying out our plan. You people must have faith; you must not be stampeded by rumors or guesses. Let us unite in banishing fear. We have provided the machinery to restore our financial system; it is up to you to support and make it work.

It is your problem no less than it is mine. Together we cannot fail.

Note

1. In the 4th paragraph, the date printed as 'March 3d' rather than 'March 3rd' reproduces the document as it was originally published. APP policy is to reproduce as accurately as possible the original published document.

[2]

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A theory of systemic risk and design of prudential bank regulation

Viral V. Acharya[a,b,c,*]

[a] London Business School, Regent's Park, London NW1 4SA, United Kingdom
[b] Stern School of Business, New York University, 44 West 4th St., Suite 9-84, New York, NY 10012, United States
[c] CEPR, United Kingdom

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ABSTRACT

Systemic risk is modeled as the endogenously chosen correlation of returns on assets held by banks. The limited liability of banks and the presence of a negative externality of one bank's failure on the health of other banks give rise to a *systemic risk-shifting* incentive where all banks undertake correlated investments, thereby increasing economy-wide aggregate risk. Regulatory mechanisms such as bank closure policy and capital adequacy requirements that are commonly based only on a bank's *own* risk fail to mitigate aggregate risk-shifting incentives, and can, in fact, accentuate systemic risk. Prudential regulation is shown to operate at a collective level, regulating each bank as a function of both its *joint* (correlated) risk with other banks as well as its individual (bank-specific) risk.

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1. Introduction

1.1. General overview

A financial crisis is "systemic" in nature if many banks fail together, or if one bank's failure propagates as a contagion causing the failure of many banks. At the heart of bank regulation is a deep-seated

* Correspondence address: Stern School of Business, New York University, 44 West 4th St., Suite 9-84, New York, NY 10012, United States. Tel.: +1 212 998 0354; fax: +1 212 995 4256.
E-mail address: vacharya@stern.nyu.edu.

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concern that social and economic costs of such systemic crises are large. It is thus broadly understood that the goal of prudential regulation should be to ensure the financial stability of the system as a whole, i.e., of an institution not only individually but also as a part of the overall financial system.[1] Different reform proposals such as the ones by the Bank of International Settlements (1999) have been made with the objective of improving bank regulation, and in the aftermath of the global financial crisis of 2007–2009, many more proposals will come to the fore. A central issue is to examine these proposals under a common theoretical framework that formalizes the (often implicit) objective of ensuring efficient levels of systemic failure risk. This paper seeks to fill this important gap in the literature.

The standard theoretical approach to the design of bank regulation considers a "representative" bank and its response to particular regulatory mechanisms such as taxes, closure policy, capital requirements, etc. Such partial equilibrium approach has a serious shortcoming from the standpoint of understanding sources of, and addressing, inefficient systemic risk. In particular, it ignores that in general equilibrium, each bank's investment choice has an externality on the payoffs of other banks and thus on their investment choices. Consequently, banks can be viewed as playing a strategic Nash game in responding to financial externalities and regulatory mechanisms. Recognizing this shortcoming of representative bank models, this paper develops a unified framework with multiple banks to study the essential properties of prudential bank regulation that takes into account both individual and systemic bank failure risk.

Our analysis has two features: one positive and one normative. The positive feature of the analysis provides a precise definition and an equilibrium characterization of systemic risk. Unlike most of the extant literature on systemic risk (see Section 2) that has focused on bank liability structures, we define systemic risk as the joint failure risk arising from the correlation of returns on asset side of bank balance sheets. Moreover, we give a characterization of conditions under which in equilibrium, banks prefer an inefficiently high correlation of asset returns ("herd"), giving rise to systemic or aggregate risk.

The normative feature of the analysis involves the design of optimal regulation to mitigate inefficient systemic risk. To this end, we first demonstrate that the design of regulatory mechanisms, such as bank closure policy and capital adequacy requirements, based *only* on individual bank risk could be suboptimal in a multiple bank context, and may well have the unintended effect of accentuating systemic risk. Next, we show that optimal regulation should be "collective" in nature and should involve the *joint* failure risk of banks as well as their individual failure risk. In particular, (i) bank closure policy should exhibit little forbearance upon joint bank failures and conduct bank sales upon individual bank failures, and (ii) capital adequacy requirements should be increasing in the correlation of risks across banks as well as in individual risks.

1.2. Model overview

In our model, banks have access to deposits that take the form of a simple debt contract. Upon borrowing, banks invest in risky and safe assets. In addition, they choose the "industry" in which they undertake risky investments. The choice of industry by different banks determines the correlation of their portfolio returns. Systemic risk arises as an *endogenous* consequence when in equilibrium, banks prefer to lend to similar industries.[2]

Since deposit contract is not explicitly contingent on bank characteristics, the depositor losses resulting from bank failures are not internalized by the bankowners. This externality generates a role for regulation. The regulator in our model is a *central bank* whose objective is to maximize the sum of the welfare of the bankowners and the depositors net of any social costs of financial distress.

[1] For example, Stephen G. Cecchetti, former Director of Research at the Federal Reserve Bank of New York, mentioned in his remarks at a symposium on the future of financial systems, "The need to protect consumers gives rise to prudential regulation whose main focus is on the failure of the individual firm... The second basic justification for regulation is to reduce systemic risk. In this capacity, the regulator really functions as the risk manager for the financial system as a whole." (Cecchetti, 1999).

[2] In practice, joint failure risk may be determined by a more complex pattern of inter-bank loans, derivatives, and other transactions.

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