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New Economic Thinking

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Masters of Illusion: Bank and Regulatory Accounting for Losses in Distressed Banks

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Working Paper No. 136

August 27, 2020

Abstract

This essay is part of a larger work on the history of Federal Reserve policymaking entitled *Banking on Bull*. The study seeks to explain why the instruments of central banking inevitably break down over time. A big part of the explanation is that policymakers want accounting measures of bank net worth to be flexible enough to allow bankers and regulators to slow the release of adverse information about distressed banks, particularly very large ones. Modern regulatory frameworks focus on maintaining what can be described as the adequacy of accounting capital. But this framework is *bull*, because in tough times, bank accountants know how to make losses disappear.

https://doi.org/10.36687/inetwp136

JEL Codes: E58, G21, G32

Keywords: capital requirements, too big to fail, loss recognition, income-distribution effects

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"When it becomes serious, you have to lie."
Jean-Claude Juncker, President of the European Commission from 2014 to 2019.

The tools of a professional illusionist are misdirection, verbal embellishment, and a cloaking device. I was lucky enough to attend a performance by Siegfried and Roy before they retired. These gentlemen advertised themselves as "masters of the impossible." Their act consisted of making lions, tigers, and finally an elephant disappear in the time it took to close and reopen a curtain. What made the performance I attended special is that during the finale a backstage breeze briefly prevented the curtain from staying completely shut. This allowed a few people in my corner of the theater to see a bare-chested rider in white pantaloons using a spear to drive the elephant onto a trap-door elevator that was rapidly taking them both to a passage under the stage. When the curtain opened fully again, most of the audience cheered and clapped in wonder. But the people around me sat in bemused silence.

I. Efforts to Prevent Accounting Statements from Being Used as Cloaking Devices

Bankers are illusionists, too. They want *us* to think that they can make losses disappear by simply not reserving for them. Accounting tools they use to build an illusory balance sheet seek to: overvalue assets, undervalue liabilities, and enlist accountants to help them bury adverse information in accounts they believe outsiders will not understand.

How and whether information is released to the public is a critical part of managing any business. Corporations produce, collect, verify, analyze, store, and transmit pieces of information that, when honestly presented, accurately summarize their per-period performance and end-of-the-period financial condition. But corporate insiders seldom welcome the opportunity to let outsiders see information that might embarrass them. Opportunities to hide relevant information from outside stakeholders give them the "magical" power to delay outside recognition of emerging problems. Anytime a firm takes one or two turns for the worse, insiders will be tempted to use their power to cloak their firm's problems in ways that, at the expense of outside investors and creditors, protect their personal reputations, wealth and job prospects until they can make some sort of getaway.

To diminish this temptation, a code of corporate-governance law exists. Accounting standards and corporate-governance controls establish a "disclosure framework" that purports to push back the curtain on internal information flows and whether and how important information might be suppressed before it reaches the executive suite. Disclosure requirements are meant to help outside parties to monitor and control corporate behavior by identifying and punishing cases of "willful blindness" and false reporting.

In principle, auditors identify irregularities in corporate accounts and flag them for close follow-up review by other inside and outside "watchdogs." In practice, auditors' bigger concern may be to establish performance standards that shield them (and possibly the executives to whom they report) from liability for scandals they may have helped to brew at client firms. As in the common-law tests for managerial fraud, it is hard to establish that an accountant's professed ignorance was willful. A prosecutor must present convincing evidence that an accused *intentionally* kept his or her self unaware of particular dangers specifically to avoid liability for the consequences.

When managers believe their firm is too big to fail, they are tempted to take risks severe enough to endanger the survival of their enterprise. For top managers of the world's largest banks, I believe that society would be better served if the burden of proof were reversed. Top managers' willfulness should be (rebuttably) presumed by virtue of their high place in the firm. Evidence of the awareness and competence that officials showed in climbing to the top of the job ladder at a giant enterprise should obviate the need to prove willfulness.

In principle, an accountant's duty is to act as a watchdog for corporate and public interests. A watchdog's job is: "to probe, to uncover, to check, to expose, to unveil, to question, to interrogate . . . to disbelieve, until that which we are being told can be proved to be true." (Forsythe, 1999). Again, in principle, managers must either prove the "recoverability" of their loans or make bad-debt provisions on their balance sheets that record amounts unlikely to be repaid. Watchdogs lower stakeholder coordination costs by designing and enforcing the disclosure requirement and by policing managerial behavior generally. Internally, a firm's board of directors and auditing team are tasked with developing sound and comprehensive reporting safeguards and detecting deviations from them. Externally, the reliability of the work of internal watchdogs is tested by numerous other specialists. These outside watchdogs make up the professions that Coffee (2006) calls "Gatekeepers": outside auditors, stock analysts, credit-rating agencies, standard-setting professional organizations, regulators, government examiners, law- enforcement personnel, and information media (the "press").

But, in practice, every phase of financial reporting is beset with conflicts of interest. The frequency with which corporate scandals arise shows that corporate officers are often reluctant to surface adverse information about a firm's performance and risk-taking either to their boards or to public watchdogs and other outside parties. In many jurisdictions, flaws in the ethical codes of watchdog professions cunningly encourage their members to abet client efforts to hide losses and manufacture other kinds of misinformation.

In banking, cunning generally concerns itself with manipulating the reported values for net earnings and net assets. This is done in many ways, but the simplest is to underprovision for expected future losses on loans they have booked. For example, in the first half of 2020, US banks set aside roughly $115 billion for expected future loan losses. With median forecasts of GDP growth hovering around -5 percent through 2021, lifetime loan losses could easily be three times that number.

Besides simply under-reserving for anticipated loan losses, one of the simplest forms of window-dressing is to move loss exposures off balance sheet, for example, by parking a troublesome position in a cross-border affiliate. Another useful method is to invent artificial (i.e., untradeable or intangible) assets such as “core deposit intangibles” or “tax-loss carryforwards.” The former allows bank managers to treat their estimates of the loyalty (i.e., the “stickiness”) of the deposit base their bank acquires in a merger or acquisition. Tax-loss carryforwards are equally inventive. They purport to turn losses that exceed taxable income this year into an earnings asset by supposing that they can be deducted in future years based on their estimates of expected profits.

In many cases, *de facto* losses can be hidden by rolling over the distressed loan that causes them. This allows the loan to be classified as “performing.” Of course, such evergreening is dishonest and broadly outlawed by the accounting profession’s carefully worded rules and standards. But in accounting games of hide and seek, rules and standards can be (and often are) gotten around. The lagged and measured response of watchdogs and regulators embedded in the Reregulation leg of the Regulatory Dialectic predicts that, in practice, blanket rules and standards cannot be repaired or retargeted quickly enough to keep up with the loopholes and evasions that teams of strongly motivated managers of zombie or criminal institutions can devise.

In the US, bank loans have traditionally been reported at par value until and unless payments required by the loan contract have been delinquent for 6 months or more. Under this “estimable and probable” standard, loss exposures are not recognized until after a default event occurs. Such an event seldom occurs until long after the bank and the borrower have exhausted efforts to keep the loan appearing “current.”

The estimable-and-probable standard can generate great pressure on lower-level bank compliance personnel to certify estimates that “bend the rules” to produce income statements and balance sheets that ignore the effects of emerging losses either at the bank or its client. Gretchen Morgenson (2019) discusses the pressure exerted on one Credit Suisse executive in detail.

The employee, Colleen Graham, was fired after 20 years of service at the bank. She maintains that her firing was in retaliation for objecting to higher-ups’ plan to hide losses on a joint venture from Credit Suisse’s outside auditor. As her opposition hardened, she began to experience an escalating pattern of intimidation and harassment that left her “scared for [her] safety and that of her family.” The firm, of course, states that her claims are “entirely baseless.” Because it will be hard for her to document the extent of the bullying she experienced, the firm remains confident that, in any civil court or administrative hearing, it will prevail.

The estimable-and-probable standard had been scheduled for replacement in 2020 when a Current Expected Credit Loss (CECL) standard was to be phased in. Under this standard, a reserve for credit losses would have been established for *all* loans when they are made. This reserve is meant to force banks to recognize credit losses earlier. This was to be accomplished by using “forward looking” model-based information to reduce the book value of individual loans according to evidence of their degree of riskiness. But the nearly-unknowable loss exposures generated by the Covid pandemic led authorities everywhere to abandon the CECL standard and expand rather than contract banks’ opportunities to bury loan losses.

Lobbying for implementation delays and loophole-laden phrasing plays a central part in the

Dialectical Theory of the Regulatory process. This theory presumes that parties actively resist efforts to impose restraints on their profit-making activities. Under pressure from Italian banks (especially), in August 2019 the implementation date for CECL in Europe had already been pushed back a year. This so-called "accounting relief" temporarily legitimizes the very practices that are scheduled to be outlawed. It also gives managers of troubled banks additional time to devise ways to frustrate the intent of whatever new standards authorities plan to put in place. To confirm that this "relief" expanded the flow of safety-net subsidies to Europe's zombie banks, the stock price of deeply distressed banks such as Unicredit rose almost one percent on news of the postponement.

In Europe, an experimental CECL standard was applied to a sample of European banks beginning in the first fiscal quarter of 2018 (Oberson, 2019). Oberson's analysis of this sample examines how much the new standard improved the ability of CECL loss provisions to predict interest spreads in markets for credit default swaps. As the Dialectical Theory of Regulation predicts, the improvement observed was modest at best. Troubled clients will always be willing and eager to pay for "concealment services" so that initial improvements in the accuracy of loss provisioning are small and hard to sustain over time.

a. Information Risk: How Far Can We Trust Accountants?

In the US, the Sarbanes-Oxley Act of 2002 placed strong truth-telling obligations on corporate officers and increased penalties for misrepresenting material facts. However, the Act did nothing to increase accountability for wily accountants who "honestly" help dishonest officers to search for reporting loopholes that can provide *legally defensible ways* for their accountants to certify deceitful claims. This asymmetry in liability between bankers and their accountants is no accident.

The accounting profession has a worldwide history of opposing meaningful ethical reform. As long as auditors can mask malicious or fraudulent intent, they can usually weasel out of civil liability for abetting client loss concealment. Accounting firms can do this most easily by requiring clients to accept covenants in audit-service contracts designed to limit their firm's responsibility to affirming that any figure its employees bless was constructed by one of several professionally "approved" techniques.

Auditors' professional training and access to inside information enable them to uncover weakness better than other outsiders. But "flexible" rules and deals that give them leeway not to challenge dicey reporting practices deliberately mis-serve the information-using public. Professional norms and codes *allow*, but seldom *require* auditors either: (1) to highlight particularly aggressive assumptions; (2) to use statistical methods to double check the reliability of dodgy facts and projections against the implications of relevant other evidence; or (3) to express specific suspicions they may have about potential bias or distortion.

Treating information and disinformation as fluids pumped from corporate pumping stations, Figure 2.1 illustrates what happens when a gap exists between the accountability for truth-telling imposed on a bank's insiders and the accountability assigned to producers of watchdog services. The conflicts of interest such gaps allow complicate and distort the decisions of conscientious and corrupt accountants alike. Accountability gaps make it possible for an opportunistic auditor to make deals that generate concealment revenues for his or her firm and to disguise these revenues as payments for more-wholesome services.

Accountability gaps encourage auditors to ignore or mischaracterize important information. Figure 2.2 tells us that the Big Four accounting firms have mishandled almost one-third of their audits in recent years. If cardiologists had a diagnostic record this poor, heads would roll. Medical schools, hospitals, and the American Medical Association would find themselves under enormous public and government pressure to reduce their error rates.

A study of 800 failed audits shows that bad audits seldom result in formal disciplinary actions. Figure 2.3 shows that the Securities and Exchange Commission disciplined accounting firms in less than four and a half percent of these cases. The accounting industry's self-regulatory arm –The Public Company Accounting Oversight Board—imposed penalties at roughly half that rate.

During a trial about accounting mischief observed in a bank failure case, I was scolded by a judge for light-heartedly telling a cross examiner that, within the accounting industry, there was and is a huge market for false and misleading information. In the world of business, bringing in sizeable new revenues is sometimes called "making it rain." My point was that, in some firms, unscrupulous rainmakers advance more rapidly than an equally talented, but conscientious employee. To the extent that career ladders and markets advance unprincipled individuals and firms ahead of their more-principled competitors (Cowle and Rowe, 2019), an industry's leaders develop a vested interest in resisting reform. Highly placed, but unscrupulous rainmakers must be expected to lobby for accounting standards that protect the rents they and their firms earn from abetting deceitful behavior.

b. Kantian Golden Rule for Any Profession

Philosophers debate about whether anyone can formulate a set of universal moral principles. But in the UK and its former colonies, common-law theories of corporate contracting come close to doing so. Three principles dictate penalties in civil cases, but these criteria are not explicitly applied in criminal courts. Common law principles impose broad duties of competence, loyalty, and care on all parties to a contract. In turn, these duties establish norms for assessing whether the exchange (say) of compensation for services proved fair. These norms require insiders and outsiders alike to explore the economic perspectives of contractual counterparties and to avoid doing insufficiently compensated harm to any of them.

This Kantian principle of non-exploitation (Kant, 1785) accords with Taleb's Silver Rule of Corporate Governance (2018): "Do not do unto others as you would have them not do unto you."

Either formulation can serve as a touchstone by which to pinpoint conflicts in the incentive systems under which real-world corporate managers and watchdog professions operate.

In formulating and enforcing standards that define conscientious contract performance, every profession courts the respect and confidence of the general public. A profession's incentive system is "evenhanded" or "impartial" if it minimizes temptations for its members to engage in inefficient, dishonest, or exploitive behavior. Still, until the ethical code of any nation's accounting industry firmly embraces two lesser duties—to avoid corrupting forms of compensation for their services and to assure the economic meaningfulness of the income and net-worth figures corporations publish—the profession will never garner the authority and prestige its members covet.

The issue is not whether accounting or other professional standards should be rules-based or principles-based. Nor would it make much difference if audit firms were banned from performing a few specific types of non-audit services. As long as deception promises to be profitable *ex ante*, the rents generated by opportunistically creating and widening reporting loopholes will support career ladders that penalize the exercise of principled behavior by bankers and watchdogs alike.

The most reliable way to improve accounting transparency is to make loophole mining less profitable. While I believe that over-aggressive loophole miners should be treated as thieves by the criminal law-enforcement system, it would be helpful if statutory law were to insist that any firm that supplies external auditing services write an easy-to-enforce guarantee of the reliability of its work. This could be done by requiring audit firms either: (1) to directly insure end-users against provable harm from defective work or (2) to supplement the capital of small audit firms, partner with a state-certified insurance company to write credible liability insurance policies for the directors and officers of each and every firm whose corporate reports it certifies. By requiring information and protection from deception to be produced in tandem, a government could ensure that much of the earnings that a firm's auditing arm might generate from overlooking poor performance or bad behavior at a client firm would be offset by the liability that countenancing disinformation would create for the auditor on its insurance book.

II. Tandem Production of Deposit Insurance and Supervisory Services

The most prominent element of government safety nets is deposit insurance. In the US, the Federal Deposit Insurance Corporate (FDIC) has since its inception produced supervisory and "insurance" services in tandem. I put the word *insurance* in quotes because it is a misnomer. An insurance contract is written against a series of specified events whose actuarial potential to ruin an insured's ability to service its creditors must be calculable in advance. Deposit insurance does not function in this way.

Deposit insurance contracts and other *explicit* government guarantees are *formal* arrangements for backing up selected financial-sector liabilities. But for too-big-to-fail (TBTF) banks, the value of explicit guarantees is little more than pocket change. The economic and political difficulties of shutting down a very big bank create additional channels of support in the form of anticipated supervisory forbearances. Authorities' reluctance to enforce solvency standards offer further and (far more important) *implicit* guarantees. Formal or informal delays in enforcing solvency standards when an insured bank comes under duress is a form of implicit government credit support that lasts until the bank's health is restored. Uninsured creditors expect (and very much want) this support to come into effect if and when bankers and supervisors fail to keep the financial system well-capitalized.

To grasp how implicit deposit insurance protection works and how it must be managed, one must understand that the explicit coverage represents an unconditional third-party *guarantee* of a few designated classes of a bank's debts. Because the government's side of depositor guarantees does not limit the set of events that might undermine a bank's ability to repay its creditors, the contract would be unbalanced unless it included a series of enforceable *stop-loss provisions*. Every guarantor needs the right to prevent the party it guarantees from endlessly doubling and redoubling its losses and risk exposures when and as losses eat away the guaranteed party's self-contributed net worth. For this reason, in the event a bank experiences a *demonstrable* shortage of capital or in several other contractually specified circumstances, stop-loss provisions give government officials a formal *right* to take control of a distressed bank's balance-sheet decisions and/or to change or severely sanction its management team.

But bankers strongly resist their government's efforts to exercise this right. Because of bankers' ability to cloak the channels through which they ride their problems out of sight, demonstrating a complex bank's capital shortage is no easy matter. To rule a bank insolvent, supervisors must be prepared to overcome a number of accounting, administrative, political, and judicial challenges. These challenges lessen the value of the government's stop-loss rights by complicating their effective exercise. By definition, in the case of any truly TBTF institution, the likely delay in enforcing solvency requirements is indefinite enough to destroy the value of stop-loss rights entirely.

In an industry crisis, this *disposition toward forbearance* creates a risk-hungry herd of what Kane (1989a) characterizes as "zombie" banks. A zombie bank is a financial institution whose economic net worth is less than zero, but continues to operate because its ability to repay its debts is credibly backed up by implicit or explicit government credit support. A zombie can not only stay in business, it can grow its assets massively. But it can only do this when and as long as creditors are confident that one or more governments stand ready to force their country's taxpayers to make good on any missed payments. The unwary taxpayers supplying implicit support may be in the bank's home country or elsewhere. But if and when creditors feel the need to test the reliability and durability of a zombie institution's implicit network of support, its managers must expect to face runs by uninsured creditors and margin calls from counterparties in derivatives transactions. When and if many banks experience widespread and insuperable difficulties in meeting these obligations, a *systemic crisis* is said to occur.

The economic life a zombie bank enjoys is an unnatural life-in-death existence of the kind portrayed in George Romero's horror films. In movies such as *Night of the Living Dead* and *Dawn of the Dead*, corpses climb out of their graves and lumber around hunting for food. They hunger for only one thing – human flesh. When a living-dead "zombie" feeds on another human, that human dies quickly and its corpse soon transforms itself into a zombie, too.

Many large European banks (Deutsche Bank, in particular) have, for some time, been zombie institutions. As zombies, they have risen from a would-be corporate grave. Their insolvency distorts their risk-taking incentives and spreads insolvency to their competitors. In hopes of restoring their solvency quickly, they hunger for tail risk. To generate enough deals to support this hope, they squeeze their profit margins to unsustainable levels. This creates new zombies by undercutting the profit margins that close competitors can enforce.

Zombie institutions are insolvent only in the sense that, because of an abundance of poorly performing loans and investments, returns earned on their assets fall far short of the level needed to service their debt. But zombie firms' best asset is a hidden one. It consists of their ability to forestall their demise by commanding implicit government support through national, regional, and international safety nets.

III. Shakiness of Liquidity and Loan-Loss Reserves as Tools for Avoiding Insolvency

A reserve is something set aside for a particular use. For over half a century, central-banking practice focused on the level and composition of a bank's liquidity reserves. Such reserves are special-purpose accounts usually constructed by combining or weighting designated items on a bank's balance sheets. In the regulatory and supervisory arenas, three reserve accounts are of special importance: (1) loan-loss reserves; (2) vault cash and reserves on deposit at the Federal Reserve; and (3) other items that, for regulatory purposes, supervisors designate as loss-absorbing capital.

a. *Loan-loss reserves* are a contra-asset. This means that this reserve is recorded as a *negative item* on the asset side of a bank's balance sheet. Loan-loss reserves reduce the book value of outstanding loans based on accounting rules governing how a bank can estimate losses expected across its loan portfolio. The nominal purpose of this account is to help examiners and other supervisory personnel to identify and (where necessary) mark down or charge off the value of risky and troubled loans. However, delaying charge-offs and under-reserving for loss exposures is a common way for managers of an insolvent bank to prolong their firm's life.

b. The other two reserve accounts are segregated accounts that are meant to help supervisors to assure a bank's ability to handle creditor runs. The total value of items in these accounts must equal or exceed heavily lobbied prudential minimums set by the central bank. Both sets of requirements are expressed as a ratio to one or another class of liabilities. Along with credit lines established with other lenders, the sum of a bank's vault cash and Federal Reserve deposits represents its first line of on-balance-sheet "*liquidity reserves*." Percentage requirements for these items have traditionally been set higher for demand deposits than for time and savings deposits.

For many years, policymakers imagined that they could restrain movements in unemployment and price levels by specifically targeting either the level or growth rate of different combinations of nonrequired and nonborrowed liquidity reserves in the banking system. These efforts had mixed success and many critics. In any case, as the Dialectical Theory of Regulation implies, regulatory arbitrage has long since worn out their usefulness for this purpose.

Similarly, for most of the Fed's first 70 years, adjustments in the levels of liquidity requirements were thought to be an important tool of contra cyclical monetary policy. In fact, the first edition of Samuelson's *Economics* (1948, p. 348) called the central-bank's ability to raise required levels of liquidity reserves second in importance to open-market operations.

IV. The Risk-Bearing Role of a Bank's Capital Account

To generate profits, banks deliberately expose themselves to default and other valuation risks. To fund the resulting risk exposures, banks supplement their ownership capital with liabilities (such as checking deposits) that are generally far more liquid than most of the assets they hold in their portfolio. Liquidity premia built into the returns on earning assets are expected to help cover the interest paid to depositors and other creditors and to leave something for distribution as implicit or explicit dividends to stockholders.

A firm is said to be well-capitalized when its accounts show an appropriate balance between equity and debt. Banking's age-old secret is that, without outside support, even a well- capitalized bank cannot survive a full-on run by its creditors. As a stand-by source of liquidity, a careful build-up of a bank's liquidity reserves has always been conceived as one way to discourage bank runs. But in terms of forgone income, it is a costly way.

a) Managing Bank Runs

The hallmark of a financial crisis is a widespread bank run. Preventing and stopping a destructive run before it destroys numerous individual banks is the seldom-spoken number-one mission of prudential regulation and supervision. In pursuing this mission, liquidity and capital requirements are seen as preventive medicines, and access to temporary central-bank funding from the central bank's "discount window" is conceived as a temporary cure.

During the first stage of a depositor run, a bank can cover depositor withdrawals in two ways: (1) from its flow of new earnings and (2) by selling or borrowing liquid assets. The benefit of owning perfectly liquid assets (such as balances on deposit at the Fed) is that these assets can turn creditor claims into cash on known terms with virtually no delay and with no impact on the bank's net-worth account. But if the run exhausts the bank's liquid resources --and especially if other banks are experiencing a run at the same time-- the urgency of its need to sell less-liquid assets undermines the bank's ability to negotiate a fair price on its increasingly less-liquid trades. Students of banking call this the "fire sale" problem. The problem is that the more severe a bank's distress, the more the book (or accounting) value of the assets it sells has to be replaced by the fire-sale prices it receives from their sale. Since most of its liabilities remain at par as fire sales reduce the value of the bank's assets, prolonged fire sales will eventually push the bank's net worth into negative territory.

However, the practice of avoiding fire sales by making what are sometimes eye-popping amounts of emergency central bank loans to a bank undergoing a run is based on a bullsh*t norm that is imbedded in regulatory cultures everywhere. This norm maintains that, until proven otherwise, a distressed bank (particularly a very large one) has the right to be treated as if it were an economically solvent corporation. This benefit-of-the-doubt norm is sometimes defended on the grounds that the central bank is always careful to over-collateralize its loans so that *it* will suffer no losses from this policy. The problem with this defense is that the liquidity provided can and will allow uninsured creditors to escape their contractual duty to accept a write down of their claims if the bank eventually has to be liquidated. These creditors had been earning a default premium in exchange for a contractual obligation to cover a share of their bank's losses in insolvency. Managers and stockholders benefit from the opportunity to use the safety net to finance creditor withdrawals. It lets creditors shift their losses to taxpayers. The value to stockholders and managers that this policy creates is not yet (but deserves to be) acknowledged in a distressed bank's accounting balance sheet.

A regulatory norm that would treat taxpayers' stake more fairly would be for authorities to presume instead that any bank undergoing a run is almost certainly undercapitalized. Because it is costly all around for depositors to close their accounts suddenly, it is reasonable to assume that at least the early "runners" have seen something concrete to worry about. As a minimum, authorities should be authorized either to lock in uninsured creditors when a bank suffers a statutorily defined "abrupt and rapid shrinkage" in its liabilities or, in the event of failure, they should reserve the right to reverse transactions that relied on central-bank loans to fund the exit of uninsured deposits.

Almost no matter what interest rate a central bank charges, crisis funding is almost always offered at what is *de facto* a subsidized rate. After all, the very occurrence of a run tells us that private creditors have begun to doubt the bank's ability to repay them and are unwilling to roll over their claims unless they are offered substantial default and liquidity premiums that are not in fact forthcoming. In principle, the extent to which emergency loans prevent these premiums from becoming directly observable is a measure of the subsidy entailed.

Emergency loans cannot in themselves cure the distress of a bank that has become deeply insolvent. But safety-net subsidies can. Hence, the policy of providing emergency loans on weak collateral (a policy that emerged in 2008-2009) to finance a creditor run on a zombie bank seems based on the elitist assumption that, in all circumstances, halting a creditor run has a higher priority than protecting taxpayers' coerced equity stake in the bank. The adverse distributional consequences of this assumption are largely ignored.

b. Stopping Zombie Banks from Filing Illusionary Balance Sheets

Across the range of banking and securities regulation, the balance of evolving laws and rules is being pulled more and more in the industry's favor as time goes by. This is because the government side is disadvantaged in important ways. Bankers and regulators make their plays with different degrees of observability and care, and at vastly different speeds. Regulatory responses to regulation-induced innovations are made to pass through a gauntlet of kibitzers. But value-maximizing firms are free to counter regulatory responses (i.e., acts of "re-regulation") *rapidly*, enthusiastically, and ever more skillfully as the months and years slide by.

In the metagame of designing capital requirements to control regulation-induced risk-taking, regulators are outcoached, outgunned, and always playing from behind. By *outcoached*, I mean that megabankers invent and exploit new and better ways to circumvent the rules long before top regulators appreciate what is going on. By *outgunned*, I mean that megabankers can and do reward and advance creative people more freely than bureaucratic cultures can. Even worse, bureaucratic cultures tend to punish initiative in ways that drive some of their best players to the other side. Finally, by *playing from behind*, I mean that banking regulators seldom even begin to respond effectively to major forms of regulation-induced innovations until the shadowy practices have rung up a nearly insuperable lead.

This paper argues that a coarsening of professional ethics has softened what used to be strong reputational constraints on safety-net and customer abuse. Resulting waves of crises have been followed by waves of corporate-governance reforms and even the opening of a private business-integrity rating agency. But the reforms adopted have not been able to substitute adequately for the discipline that an individual banker's ethical principles used to supply.

When effective, ethical restraints have the advantage of being self-enforcing. Violating one's personal sense of honor triggers self-imposed penalties of guilt and regret. But when we discover – as was reported in the Euribor Fixing case—that in their private lives managers regularly and proudly celebrate their dishonest behavior, we can be sure that benefits of guilt and regret are vanishing beneath a bank's floorboards. By now, it should become clear that stronger links between the government's supervisory and law-enforcement systems need to be installed to take their place.

The first step in re-setting supervisory norms and installing an effective system of enforcement is to lift the curtain that has been masking taxpayers' stake. In a world in which, within a few minutes, leverage can rise sharply and asset prices can sink mightily, taxpayers' role has become too important for the accounting profession to be allowed to ignore. This means that statutes must be enacted to require the explicit itemization and regular revaluation of taxpayers' equity position in TBTF institutions. Central banks must expand their missions so that part of their job is to recognize, calculate, and publicize regularly the aggregate value of the taxpaying public's implicit stockholder interest in *economically, politically, and administratively difficult-to-unwind firms*. This reform would --by itself—make explicit the fiduciary duties of loyalty, competence, and care that regulators, supervisors, and megabank managers owe the rest of society. These duties would parallel and constrain the explicit obligations that corporate managers owe today only to their lawful shareholders. The most important of these extended duties would be to make sure that taxpayers share fairly in the firm's profits from risk-taking and receive a flow of information relevant for assessing the value of their due claim to a share of current profits.

In other work, I plan to focus on the second step in this process, which is to create incentives for managers to perform their duties to taxpayers and for regulators and supervisors to see that they do. Rather than trying to build complicated performance incentives into managerial compensation contracts, my plan is to bring statutory law and the justice system more firmly into the regulation and supervision game. As a first step, I would urge governments everywhere to implement and enforce a series of statutory requirements and penalties designed to lead bank managers and supervisors to measure and record on the balance sheet of every guaranteed firm-- as a recognized equity position-- the capitalized value of the safety-net subsidies their institution receives from taxpayer support.

The first step will not mean much without this parallel effort to enhance bank's incentives to report and service this value accurately in corporate documents – and in government reports making use of the data banks report to them. One way to do this would be to apply civil sanctions to violators, perhaps by giving the FDIC an administrative right to level a hard-to-reverse call on the personal wealth of managers and officials who can be shown to have actively corrupted their bank's reporting process. But the civil sanctions that already exist would become far more effective if legislators were to reinforce these sanctions by defining particularly vexing acts of safety-net abuse as *criminal* theft.

V. Outlines of an Improved Ethics of Supervision

Economic theory presumes that, subject to external constraints, individuals choose a series of behaviors that across their lifetimes maximize the value of a personal objective function. Laws and rules come into existence because people fear that defects in other individuals' ethical standards might expose them to behavior that would jeopardize their individual pursuit of happiness and the larger goals of the rule-making community to which they belong.

Individual bankers' incentive to circumvent or violate a given law or rule increases with the weight of the compliance burdens it imposes on them. Bank accountants and government supervisors are responsible for surveillance and for forwarding to the justice system evidence of violations of statutes and regulations that apply to bankers. Supervisory and enforcement systems seek to balance these burdens by rewarding compliance, punishing evasion, and searching out and closing loopholes that regulatees might use to skirt the rules.

To quantify the economic burden of any rule, one must study not only the costs and benefits of compliance, but the opportunity costs of circumvention as well. When rule makers want their laws and rules strictly obeyed, they spell out the behaviors that they wish to avoid and those they wish to foster in capital letters and in plain language that almost every citizen can understand. However, because of regulatory capture, important elements of complicated laws are often written by skilled lobbyists who are all too willing to help government officials with verbiage needed. In banking, laws and rules are subtly designed to be circumvented. Most rules contain an array of loopholes that are conveyed either in very small print or in coded language that the lobbyists of the institutions that sponsored them can grasp immediately.

Loopholes foster gaps in supervisory enforcement that generate a complementary set of less-appropriate *de facto* rules. These secondary rules are at least partially conjectural. For example, although the formal speed limit on a given highway might be posted at (say) 55 miles per hour, drivers confidently expect the *de facto* limit that police will actually enforce to be higher than the posted one. They also expect enforcement to adapt reasonably to exigent circumstances as these unfold.

Common law and commonsense schools of ethical theory maintain that, across any contract in which one party (the principal) delegates authority to one or more others (the agents), agents and principals owe one another duties of loyalty, competence, and care. On this hypothesis, supervisors owe at least four duties to the community that employs them:

1. <u>A duty of vision</u>: They should continually adapt their surveillance systems to counter regulatee efforts to conceal and disguise their rulebreaking;
2. <u>A duty of prompt corrective action</u>: They should stand ready to discipline rulebreakers adequately whenever a violation is observed;
3. <u>A duty of efficient operation</u>: They should produce their services at minimum social cost;
4. <u>A duty of conscientious representation</u>: In difficult circumstances, they should be prepared to put the interest of the community they serve ahead of their own.

The fourth duty is the most controversial. In principle, supervisors that were fully committed to the fourth duty would bond themselves to disclose enough information about their decision making to allow the community to make them accountable for neglecting or abusing these responsibilities. As I plan to document in a later essay, the plain fact is, so sainted a supervisor could not survive the political vetting built into the appointment process. No government wants to call attention to the adverse distributional effects it generates in the course of resolving the incentive conflicts its members face. To the contrary and in country after country, politicians want credit for encouraging bank lending to favor designated sectors of the economy, especially housing. To generate a *quid pro quo* for carrying out their side of the deal, bankers expect this class of loans to be supervised with a lighter hand, especially in times of banking turmoil (Kane, 1989b).

Traditionally, supervisory duties have been exercised locally, i.e., at the level of a bank's chartering jurisdiction. In a narrow and formal sense, most schemes for regulating and supervising commercial and investment banks are shaped and administered either at a provincial level or on a nation-by-nation basis. Changes in laws, rules and duties respond to: (1) the interplay of economic events with changing governmental goals and (2) the waxing and waning of lobbying pressure either to relax burdensome rules or to control disruptive behaviors. Kane (1977 and 1983) describes this pattern of action and reaction as an endless dialectical process. A dialectical process entails a series of back-to-back, three-stage sequences of Action, Reaction, and a Revised Action in response to the second-stage Reaction. As in a game of chess, each new action or reaction eventually provokes a response. The difference is that the game of banker avoidance and government re-regulation evolves endlessly. The equivalent of checkmate never occurs.

Today, regional and national schemes and resulting burdens on regulated parties are increasingly influenced by competitive pressure from foreign regulatory systems. In global markets, the possibility of instantaneous cross-border transfers of financial capital and risk exposures greatly limits the rule-making and enforcement capabilities of national regulators. Cross-country spillovers overlay onto the domestic policy scene a series of outside political, economic, and reputational feedbacks that individual-country bank and regulatory decisionmakers must take into account. The need to respond to such feedback is particularly intense in financial-center countries.

Internal and external lobbying pressure makes it difficult for authorities in any one country to embrace a program of genuine ethical reform. Instead, regulators in financial-center countries make a show of coordinating cross-country supervision (Basel I, II, and III), but are careful to leave *sanctions* imposed on violators within national systems. The bullsh*t in this approach is that, without meaningful sanctions, global "rules" function as little more than advisory "standards."

VI. Why Capital Requirements Can Only Be *Part* of the Answer

Regulators define a financial institution's capital as the difference between the accounting value of its asset and liability positions. The idea that capital requirements can serve as an effective stabilization tool is based on the presumption that, other things equal, the strength of an institution's hold on economic solvency (i.e., its immediate "survivability") can be meaningfully proxied by the size of its capital position.

This way of assembling numbers on a bank's balance sheet seems simple and reliable, but it is neither. It is not simple because accounting principles offer numerous ways to decide *which* positions and cash flows are and are not recorded (so-called *itemization rules*), *when* items may or may not be booked (*recognition rules*), and *how* items that are actually booked may or may not be valued (*valuation rules*). Accounting capital is *not* a reliable proxy for a firm's survivability because, as a financial institution slides toward and through the boundary of insolvency, its managers and internal accounting staff are strongly incentivized to choose rules that allow them to hide the extent of their weakness and to shift losses and further loss exposures surreptitiously onto its creditors and --through implicit and explicit government guarantees that these creditors enjoy-- onto one or another government's safety net.

Managers of difficult-to-unwind institutions see themselves as playing a game whose rules invite them to build political clout and to hide both their efforts to exercise this clout and other salient information from supervisors and other outsiders. Bankers cloak this activity in both time-tested and innovative ways. By supporting limits on the way government players are compensated in this game, the banks make sure that their side will always have more skill, more information, and fewer scruples than their opponents.

In the control and supervisory arenas, Regulators have formed a coalition with Congress and the Regulated. They reinforce partners' efforts to cloak bad behavior: (1) by not looking for trouble as hard as they might, and (2) by overstating the effectiveness and fairness of their own play. By this I mean that most regulators express to Congress and to the citizenry an unjustified confidence in their damage-control strategies (and in requirements for bank capital in particular) and are slow to identify and remedy weakness in their capacity for discipline and enforcement.

In both phases of the financial cycle, taxpayers are deceived and made to play from a poorly informed, disequilibrium position. When the economy is strong, the unbooked value of taxpayer-contributed equity is relatively low. Its small size makes it easy for other players to keep taxpayers unaware of their coerced commitment to elitist crisis-management policies until it is too late for them to do anything but play along. Still, the after-the-fact unpopularity of indiscriminate crisis bailouts tells us something important about the accounting foolery that allows potential crises to fester until they become too frightening to handle rationally. It is safe to say that most voters would reject the idea of allowing politicians to use their wealth in this way *if* they were adequately informed of the long-run consequences of routinely allowing zombie banks opportunities to gamble for resurrection.

a. What Does it Mean for a Bank to Be Insolvent?

Whatever combination of itemization, recognition, and valuation rules regulators adopt carries with it a zero threshold that defines what it means for a bank to become *insolvent*. It is important to recognize that the appearance of either *accounting or regulatory solvency* need not imply *economic solvency*, especially when those setting the definitions and enforcing the restraints are lobbied relentlessly to err on the side of forbearance.

National and international efforts to define and enforce meaningful capital requirements have foundered repeatedly on the same moral and cyclical shoals. As the economy strengthens, political pressures lead authorities to relax capital standards and, by the top of any boom, to allow key assets (in 2006-2008, residential mortgages and sovereign debt) to be classified as virtually riskless. As society's memory of the last crisis fades into oblivion, bullsh*t bank lobbyists increasingly claim – and a few may actually believe-- that "this boom is different" because of technical improvements in underwriting standards and management systems. Lobbyists push these claims to win more and more leeway in banking laws and in the accounting rules and standards that regulators use to assess capital-requirement compliance. But the off-books taxpayer support for the risk-bearing that this process entails builds a vulnerability that savvy creditors are bound to test eventually.

Crisis after crisis shows that managers of giant firms believe that they can rely on accounting trickery to overstate the capital they book in booms and to understate their risk exposures without suffering immediate repercussions. Over each cycle and around the world, managers take advantage of their country's safety net to extract a long-lasting flow of subsidies during booms. Managers share these subsidies not only with stockholders, but (through the classic subsidy-shifting process) with creditors and (through the revolving door) with government officials as well. When the boom ends and funding problems emerge, capable lawyers stand ready to discourage the prosecution of individual managers by sculpting exculpatory ways of recharacterizing managers' aggressive risk-taking.

The purpose of this essay is to clarify how effectively teams of financial illusionists can conceal developing losses and (as the Wells Fargo case illustrates) scandalously dishonest behavior. Bankers' demonstrated capacity for deception makes it irrational for the modern social contract to allow accounting measures of capital and self-administered stress tests to serve as the centerpieces of the world's strategy of financial regulation and supervision. In a crisis, the informational requirements needed to enforce meaningful capital requirements at the world's megabanks are never going to be satisfied. By turning a blind eye to their clientele's finely tuned taste for lawful (and even unlawful) deceit, regulators continue to portray capital requirements as a powerful medicine and to presume that this medicine is always taken in the dosage prescribed. This medicine --as concocted in the pharmacies of the world's central banks-- not only fails to prevent crises, but the false confidence they create helps to increase the economic damage each crisis entails. Indeed, it is easy to show how loopholes in the structure of capital requirements helped to inflate the shadow-banking, housing and securitization bubbles whose bursting triggered the Great Financial Crisis. Evidence to support this claim can be found in many places (see, for example, Caprio, Demirgüç-Kunt, and Kane, 2010; Barth, Caprio, and Levine, 2012; Admati and Hellwig, 2013).

New protocols for testing a bank's ability to survive financial distress and enhancements in supervisors' insolvency resolution regimes lie at the heart of post-crisis reforms. The idea is to increase the dosage and complexity of capital-requirements medicine and to prescribe this medicine for a larger range of firms. But by themselves, tougher capital requirements cannot establish a lasting disincentive. This is because rules that lack effective *managerial* punishments are toothless and will show their ineffectiveness when the supervisory system is once again tested by a spreading crisis. These corporate-level reforms are designed to finesse the need to punish the *human* architects of safety-net abuse. As the Regulatory Dialectic seeks to emphasize, corporate-level reforms and punishments renew the managerial game of hide-and-seek by challenging offenders to find ways to overcome the new operational constraints and enforcement methods. The game is renewed because it still pays cynical bankers to hide future risk-taking and the losses it generates as long as they can.

b. Behavior of Capital Ratios During the GFC

The root problem with capital requirements is twofold. The first difficulty is that the existence of government safety nets gives top managers of protected firms powerful incentives to intensify and conceal leverage and to arbitrage regulators' risk- weighting schemes so as to shift responsibility for funding their deepest tail risks to taxpayers. The second issue is that lobbying pressure makes sure that regulators are denied the vision, tools, and incentives necessary to stop this. Requiring firms to post more or higher-quality capital than they would prefer to post entails an effort to lower the expected return on stockholder equity below the target levels most bank managers are looking to achieve. For this reason, raising capital requirements has the undesirable side effect of increasing manager's appetite for hard-to-observe forms of tail risk. Incentive compensation they can extract for taking on this added risk of ruin closes the circle. Taking more tail risk can raise the projected rate of return on the higher levels of capital enough to make any level of regulatory capital a satisfying equilibrium for managers and stockholders.

Using quarterly data for 1974-2010, Hovakimian, Kane, and Laeven (HKL, 2012) study capital ratios at US bank holding companies that met two conditions: (1) their balance sheets were in the Compustat database and (2) their daily stock prices were reported in CRSP. Figure 2.4 shows that the mean reported value of what the Basel agreement calls the Tier 1 capital ratio at these banks moved very little between 1993 and 2010 and, implausibly, even at the height of the crisis exceeded 10 percent. In contrast, Figure 2.5 shows that HKL's synthetic estimates designed to uncloak reported asset values indicate that the mean ratio of equity capital to total assets in these same years fluctuated between -5 and +20 percent. The downside of the differences between these two estimates is a measure of supervisory failure.

HKL also show that taxpayers would have benefited substantially if authorities had restricted or reduced dividend payouts from undercapitalized banks as soon as they fell into distress. Refusing to confront the capital shortages that began to emerge in 2007 allowed regulators to permit some of the world's largest financial institutions to operate for years as zombie firms and to petition insolently for the right to pay dividends to stockholders rather than taxpayers.

These perverse incentives are rooted in the cultural norm of value maximization and reinforced by a reluctance of government lawyers to prosecute managers of key financial firms for malfeasance in open court. Megabank managers universally maintain that any strategy that reduces regulatory burdens and extracts subsidies from the safety net is *ethical* as long as it is not illegal. This essay seeks first and foremost to convince readers that this principle is not only false, but economically dangerous. I hope to convince readers to join me in questioning the claim that managers owe strict fiduciary duties of loyalty, competence, and care to their stockholders, but only statutorily covenanted duties to taxpayers and government supervisors. By covenanted duties, I mean those established –not by considerations of justice—but by formal legislative and regulatory requirements. In an economy in which megabankers virtually own the rule-making and enforcement processes, rules and requirements often function as a license to steal.

c. Accounting Creativity and Regulatory Forbearance During the Early Months of the Covid Crisis

It is instructive to view accounting and stock-market values of a bank's net worth as flawed estimates of the true value of a bank's stockholders' stake in the firm. Although profits are sometimes understated to reduce bank taxes, accounting estimates are flawed because managers generally benefit from overstating their firm's strength. This is particularly true at distressed companies. Divergences between stock-market and book-value estimates arise from balancing the costs and benefits of efforts to decode and adjust accounting numbers to calculate the losses or gains bankers choose to conceal. Kane and Unal (1990) provide a way to model some of this adjustment process.

Accounting capital (i.e., net worth) may be loosely defined as assets minus liabilities and precautionary reserves for losses. Figure 2.6 tracks the changes in one regulator-approved measure of accounting capital (termed "CET1 capital") that were posted by ten of the world's largest megabanks in the first six months of 2020. One would suppose that a massive expansion in these banks' incremental loan-loss reserves would have been required by the Covid Crisis. If so, accurate loan-loss provisions should have eaten up much of the accounting capital banks had booked at yearend 2019. Therefore, it is surprising –and a tribute to the creativity of megabank accounting departments-- to see that all but one of the world's biggest banks actually managed to record a sizeable increase in their capital account.

Figure 2.7 compares loan-loss provisioning at US members of this sample with European members. This display suggests to me that all of these megabanks understated the uncertain impact that the Covid Crisis could have on their true exposure to future loan losses. The hypothesis that stockholders were not completely fooled by these understatements is confirmed by comparing the shrinkage in each bank's stock price over the same period with the increment shown in its accounting capital in Figure 2.8.

In principle, perfectly informed accounting estimates of a bank's regulatory and stockholder capital should move one-for-one with each bank's stock price. That accounting and stock-market data show a strong *negative* correlation is convincing evidence that supervisory forbearance of accounting misrepresentation and the willingness to tolerate megabank insolvency are entrenched norms of bank regulatory culture, especially in Europe.

d. Theft by Safety Net

Sympathetic supervision allows the safety net to transfer resources surreptitiously from taxpayers to megabankers. Safety-net abuse is fundamentally a form of theft because it represents a *coerced* taking of other parties' resources.

The cultural meta-norm of fair play should require the law to recognize and penalize larceny in all its forms. A straightforward way to apply the fair-play norm to banking would be to amend corporate law to recognize explicitly that taxpayers' implicit obligations to protect selected institutions gives Too-Big-to-Fail firms a heretofore unbooked layer of loss-absorbing equity funding. The first step toward treating taxpayers fairly is to estimate and record estimates of their stake on bank balance sheets. This would give managers and directors an explicit duty to measure, disclose, and service this stakeholding fairly. Because ducking these *implicit* responsibilities has proved personally profitable, many bank managers, board members, and outside watchdogs will ignore them unless and until everyone involved is exposed to strict legal liability for performing the fiduciary duties each owes to taxpayers.

In the absence of such a reformulation of managers' and watchdogs' rights and duties, enhanced capital constraints are fundamentally an illusion. As they emerge or become operational, aggressively managed institutions are again going to game the system until it breaks down. Aided by the best financial, legal, and political minds that money can buy, megabankers have deliberately ramped up their risk-management and sleight-of-hand skills and expanded their tail-risk exposures over time. They have done this in clever and low-cost ways that, in the current cultural and informational environments, regulators are too conflicted and too confident in their policy instruments to observe, let alone to discipline.

It is instructive to break down the governmental processes that constrain the evolution of the culture and institutional structure of financial regulation and supervision in the United States into four subsystems: statute-making, rule-making, supervision, and enforcement. Like mischievous children, megabankers manipulate the links between these subsystems to craft a disciplinary framework that offers them unfair competitive advantages and recklessly forces the rest of us to absorb unwise and dangerous risks. The coerced benefits bankers garner from their recklessness rise to the level of grand larceny. I believe megabanker recklessness should be recognized as a form of embezzlement and punished as such.

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FIGURE 2.1

AGE-OLD SYSTEM FOR TRANSMITTING AND IMPERFECTLY PURIFYING DATA ON CORPORATE CONDITION AND PERFORMANCE

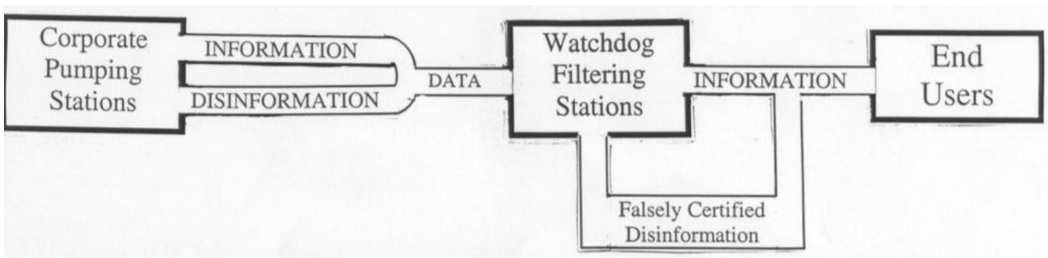
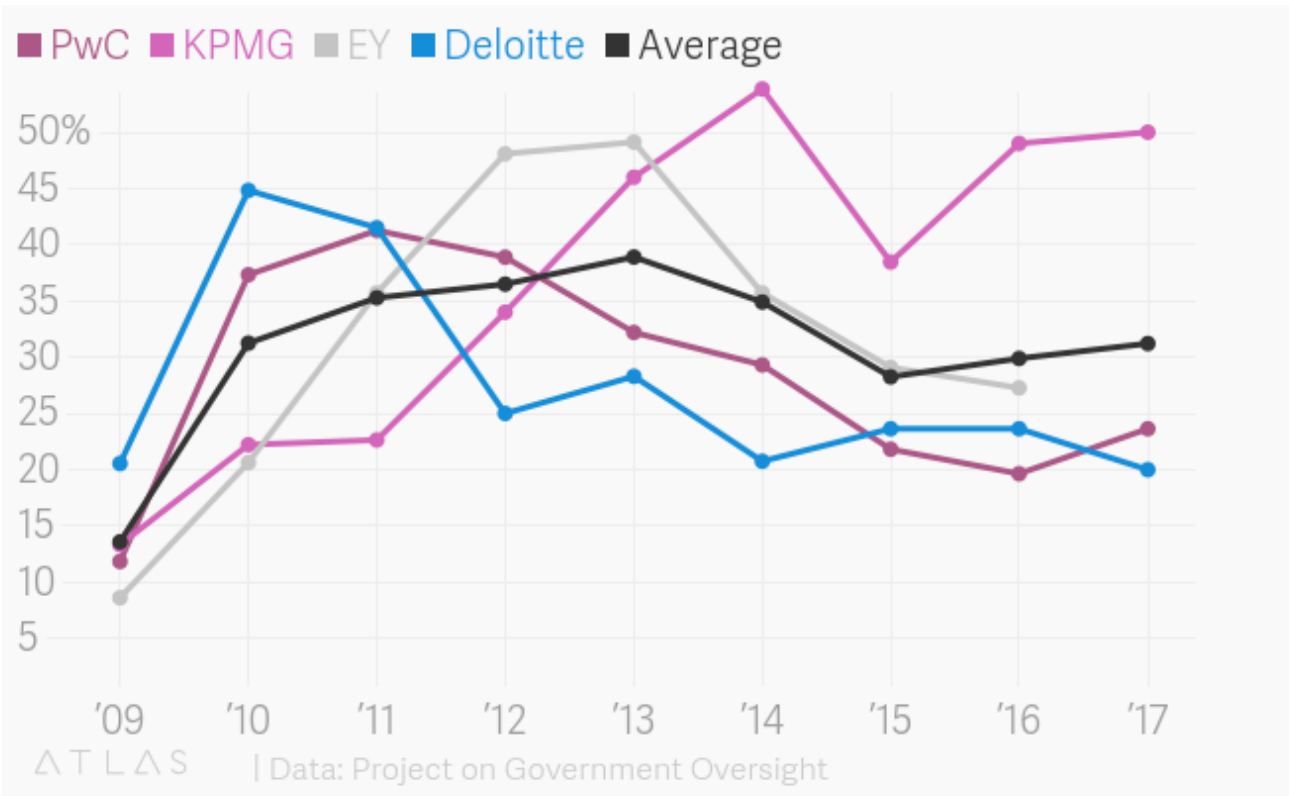


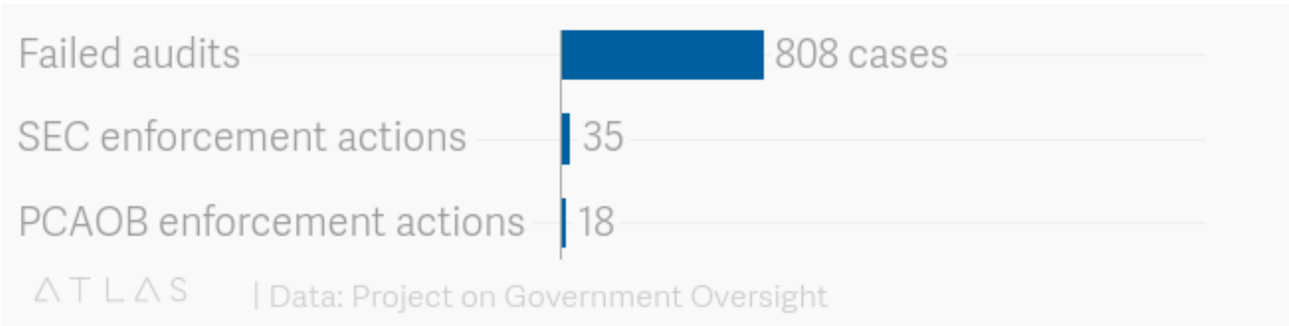
FIGURE 2.2

THE BIG FOUR BOTCHED ALMOST 1/3 OF ALL AUDITS DURING 2009-2017



Source: ATLAS

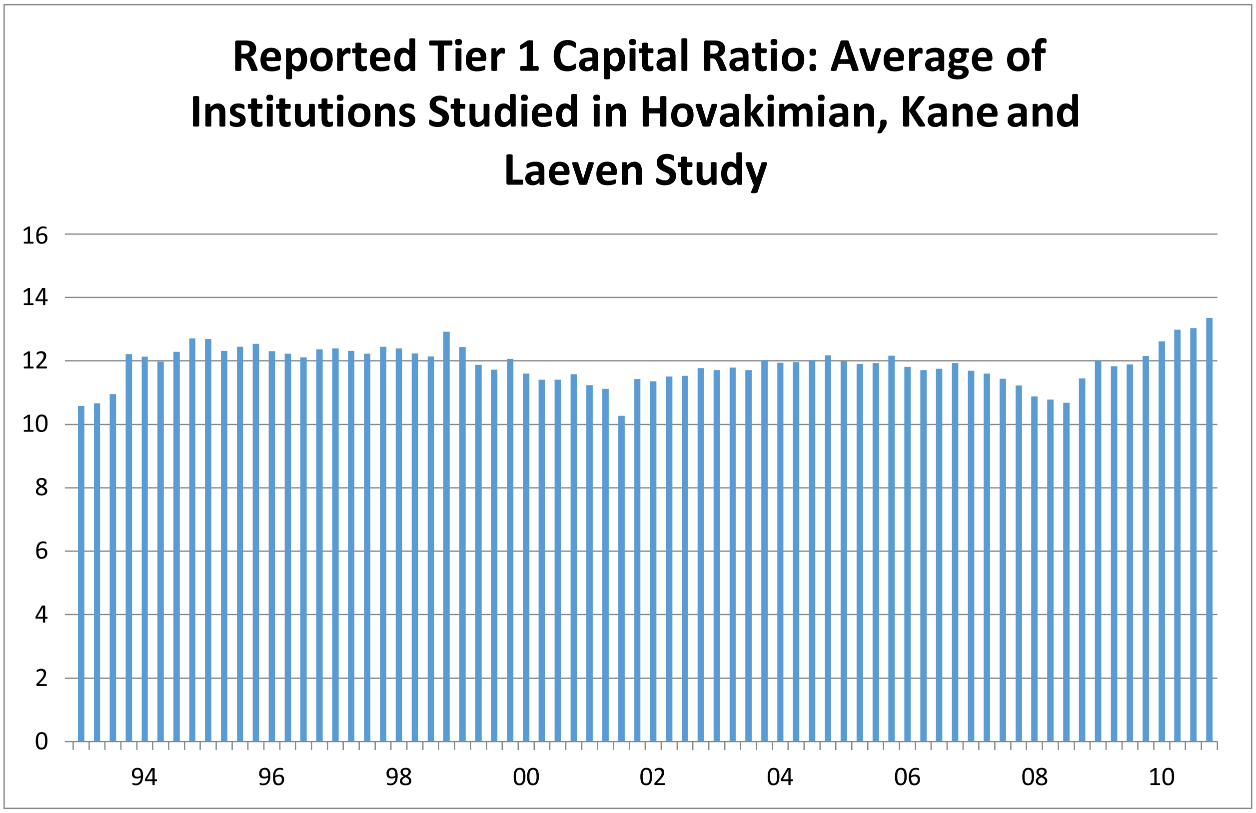
FIGURE 2.3
THE BIG FOUR WERE PUNISHED FOR A TINY FRACTION OF FAILED AUDITS BETWEEN 2009 AND 2017



Source: ATLAS

FIGURE 2.4

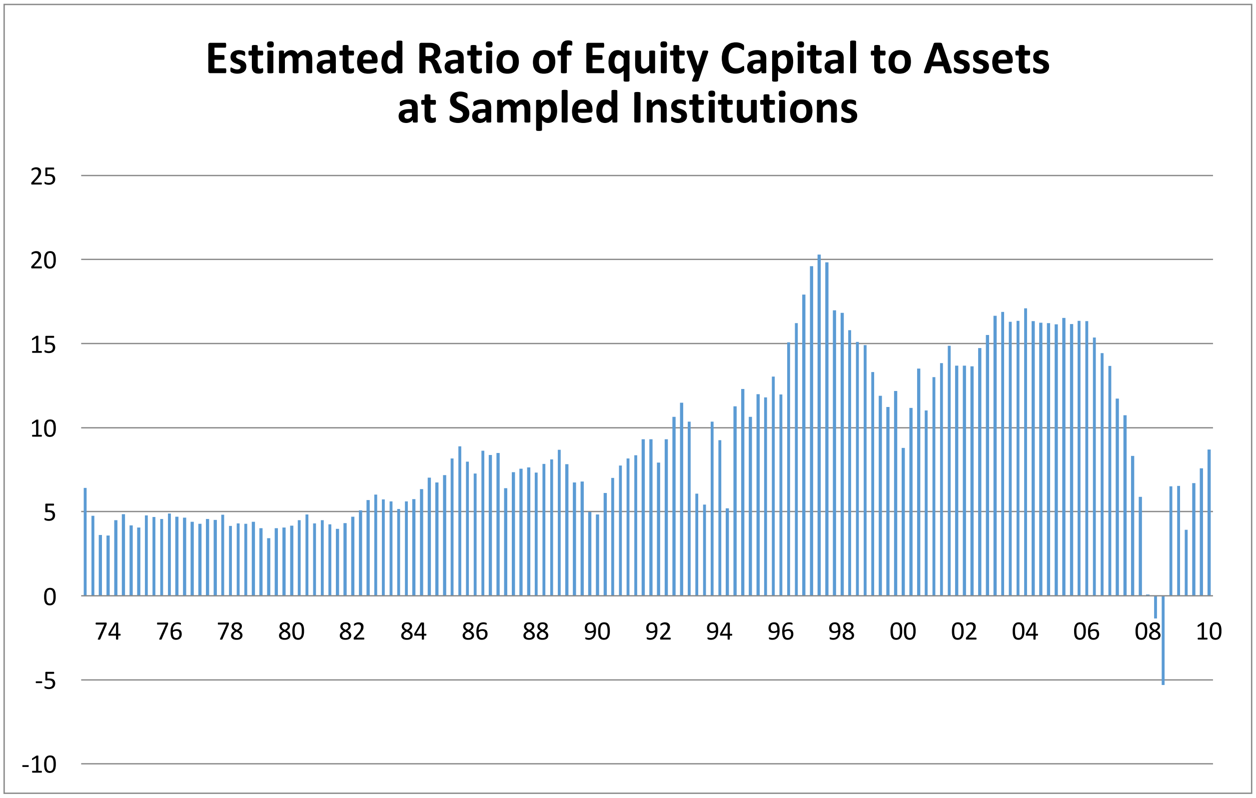
MEAN RATIO OF TIER-1 CAPITAL TO ASSETS FOR A LARGE SAMPLE OF U.S. BANK HOLDING COMPANIES, 1993-2010 (QUARTER BY QUARTER IN PERCENTAGE POINTS)



Sources: Hovakimian, Kane and Laeven (2012).

FIGURE 2.5

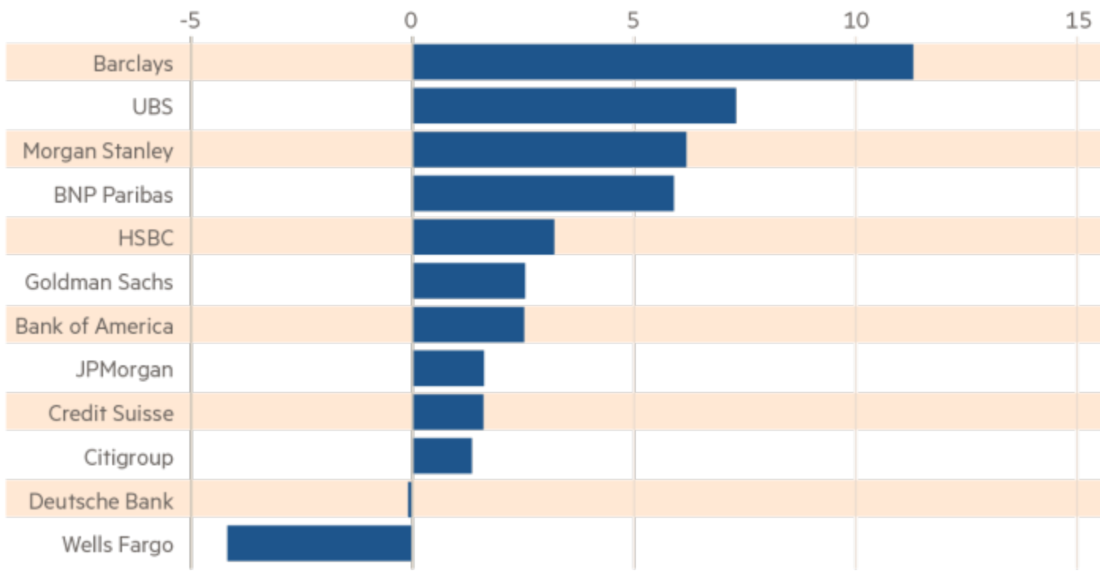
MEAN RATIO OF ESTIMATED EQUITY CAPITAL TO ASSETS FOR THE HOVAKIMIAN, KANE AND LAEVEN SAMPLE OF U.S. BANK HOLDING COMPANIES, 1974-2010 (QUARTER BY QUARTER IN PERCENT)



Sources: Hovakimian, Kane and Laeven (2012).

FIGURE 2.6

BY MIDYEAR 2020, MAJOR US AND EUROPEAN MEGABANKS DEVISED WAYS TO BOOK MORE ACCOUNTING CAPITAL* THAN THEY HAD POSTED AT THE START OF 2020



* Increment in accounting capital defined by international agreement as CET1 in local currency terms from Q4 2019 to Q2 2020 (change in banks' CET1 capital* (%)).

Source: companies

FIGURE 2.7

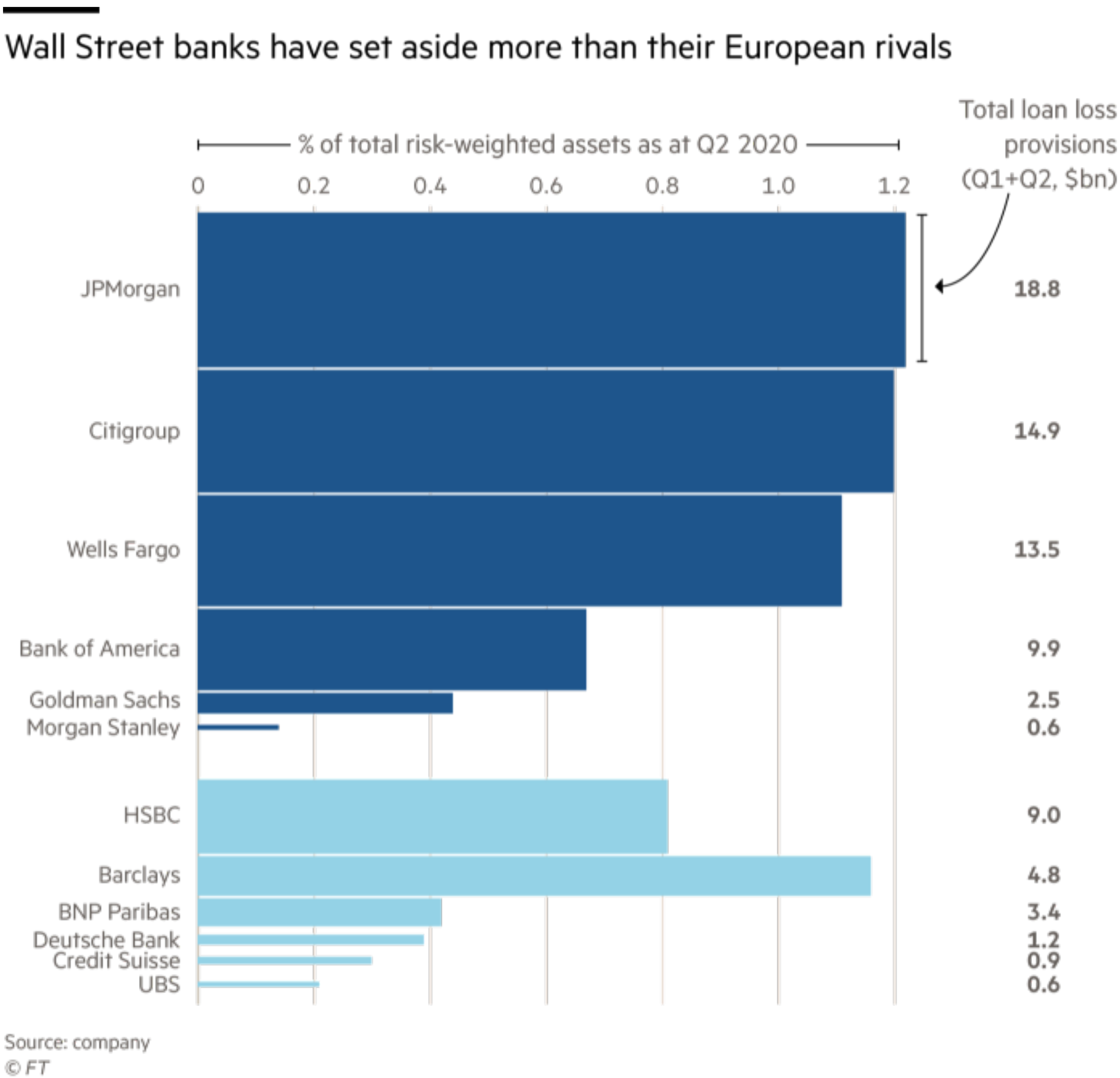
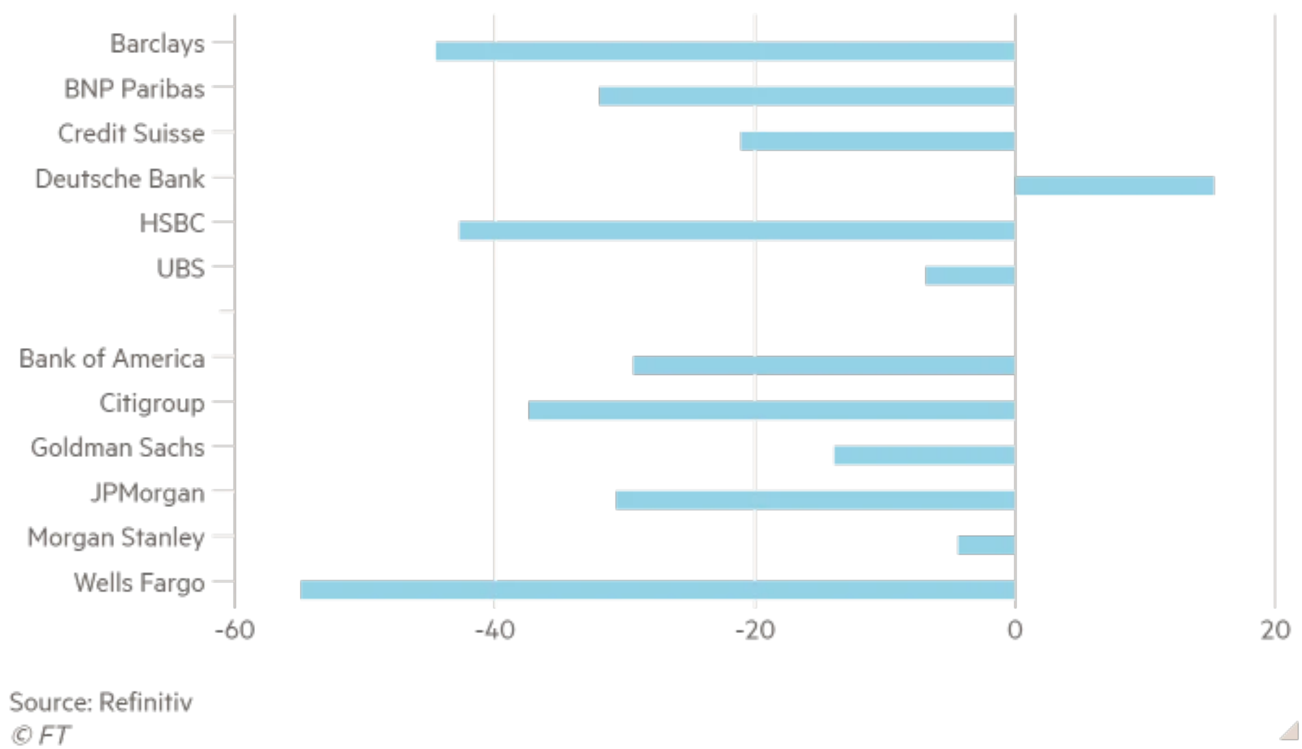

Wall Street banks have set aside more than their European rivals
% of total risk-weighted assets as at Q2 2020
0
0.2
0.4
0.6
0.8
1.0
1.2
Total loan loss provisions (Q1+Q2, $bn)
JPMorgan
18.8
Citigroup
14.9
Wells Fargo
13.5
Bank of America
9.9
Goldman Sachs
2.5
Morgan Stanley
0.6
HSBC
9.0
Barclays
4.8
BNP Paribas
3.4
Deutsche Bank
1.2
Credit Suisse
0.9
UBS
0.6
Source: company
© FT

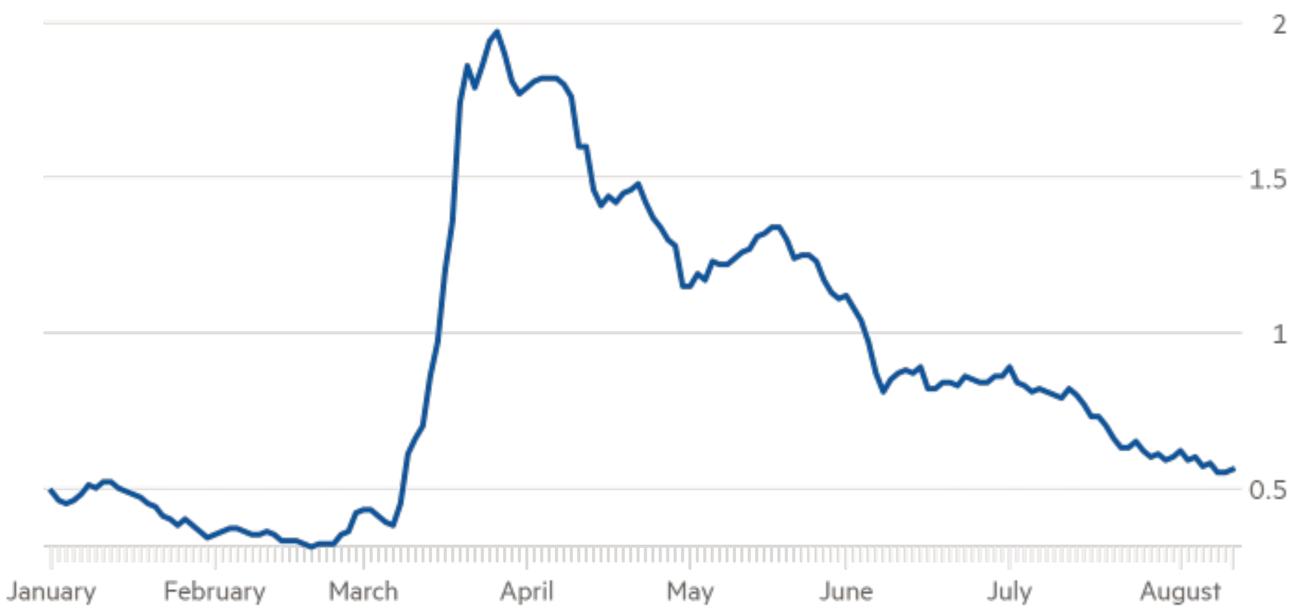
FIGURE 2.8

MOVEMENTS IN THE VALUE OF STOCK SHARES AT THE SAME 10 MEGABANKS DURING THE FIRST HALF OF 2020 EVIDENCE A LACK OF TRUST IN MEGABANK ACCOUNTING REPORTS



European corporate bond yields have fallen since the peak of the pandemic

ICE BofA Euro Corporate Index yield (%)



Source: Bloomberg