A Holistic Construct for Bank Regulatory Capital: How to Bring Order and Resilience from Complexity and Contradiction*

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- A holistic-capital regime combines an effective set of capital buffers with stringent, enforced risk controls, encouraging meaningful risk reductions instead of regulatory-capital arbitrage and still more shadow banking.
- Before the U.S. adds still more complexity to the capital rulebook via new global standards, it should review the rulebook as a whole to make regulatory capital as powerful a buffer as practicable without unintended damage to systemic stability and shared prosperity.
- Regulators now use complex, quantified capital standards as a proxy for effective supervision even when capital is an ineffective risk buffer because they don't trust themselves or supervisors in other nations. This is a poor excuse for an unnecessarily costly and even counter-productive capital regime.
- Supervisory ratings should be made public to enhance market discipline for banks and political accountability for regulators.

During his Senate confirmation hearing, the nominee for FRB supervisory vice chair, Michael Barr, said that he favors a holistic approach to setting regulatory-capital standards that considers their sum total impact rather than revising them one by one as has long been the case. The rules for larger U.S. banks are even more of a morass than the global standards on which they are modeled, affording opportunities for regulatory arbitrage, creating pockets of unanticipated risk and contributing to the redesign of American finance into a sector that does far more for financiers than the real economy. A holistic-capital construct is thus urgently needed. This brief cuts through the thousands of pages of

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capital rules through which Federal Financial Analytics' staff poured over the years to outline a path to a truly holistic capital construct achieving the critical, over-arching objective of all the current rules: safe banks in a sound financial system that enhances the prospect of stable, shared growth.

First and foremost, a holistic approach to regulatory capital requires a holistic understanding of all the rules so that individual capital standards or changes to them apply only where they make a meaningful difference to total risk reduction. Each of the regulators has tens, if not hundreds, of staff focused on each capital requirement but none has yet undertaken a review of how all of these rules work in concert even though many academic studies have questioned about the benefits of sum or even all of them in the context of all the other rules imposed since the great financial crisis. As discussed below regarding specific capital standards, supervisory requirements are also imposed to absorb the risk regulatory capital is said to buffer, with supervisory standards in some cases far better equipped to do so than quantitative and often arbitrary capital ratios.

Supervisors are in separate organizational "silos" from the staff setting capital standards and those administering stress tests, further disconnecting the parts of the safety-and-soundness regime from its over-arching, essential goal. Capital regulators seem to distrust supervisory standards because they distrust their colleagues to enforce them quickly and vigorously but transferring the cost of effective regulation from their shoulders to bank bottom lines has an array of unintended consequences in terms not only of long-term safety and soundness and growth, but also economic equality.

As shall be shown, some capital buffers are critical but have also become so complex that their total impact is contradictory or even counter-productive. This brief thus assesses capital in the context of supervision and – an often-missing element – effective and credible enforcement. The holistic capital regime we outline is not a relaxed capital regime. As shall be detailed, capital effectively targeted at the risks capital meaningfully buffers combined with stringent supervision and fast-acting enforcement facilitates financial intermediation without introducing new risks. Indeed, many unintended consequences of the current regime are effectively offset.

The Capital Swamp

In 2018, Congress responded to the burgeoning capital rulebook and its evident contradictions with three statutory fixes: a community-bank leverage ratio that allows smaller banks to pick a simple standard; a mandate that capital rules escalate in concert with a bank's size, complexity, and risk; and a modest rewrite to the supplementary leverage ratio (SLR) to exempt certain assets held by a very few custody banks. Congress thought it had heaved a mighty rock at capital complexity, but it largely did so only for banking organizations with assets below $250 billion as the agencies chose to implement these directives. The bulk of capital relief went to smaller banks, and little changed for any U.S. company deemed a global systemically important bank (GSIB), unless it was considered a custody bank.

At about the same time they were told by Congress to tailor capital regulation to better purpose, U.S. regulators agreed to proposals sure to add still more complexity. They joined their global colleagues on the Basel Committee for Banking Supervision (BCBS) to propose four major revisions to the capital rulebook. These will surely lead to new interactions with all the unchanged capital rules along with current liquidity standards, monetary-policy transmission, and the extent to which key financial activities remain within the regulatory perimeter.

The latter concern has become among the most pressing as finance evolves based often in large part on evading bank standards. A recent Federal Reserve study finds that there are now hundreds of ways around the rules costly to banks, concluding not only that firms can "choose some forms of regulation over others," but also that the perimeter fails to keep firms outside from engaging in bank-like activities without like-kind regulation and supervision.

When Capital is Not a Cure-All

Even a rapid run-through of capital standards shows how still more requirements are often a far less effective way to reduce risk than other tools readily available to regulators without the adverse macroeconomic implications of misdirected capital standards. The discussion below briefly summarizes specific standards and how each is an important risk buffer or an ineffective add-on charge with proven adverse consequences.

The Leverage Ratio

The leverage requirement has an array of unintended consequences because, while regulators do not want it to be a binding capital constraint, it has frequently acted as one because of the large positions that banks hold in assets with zero or very low capital requirements under the risk-based capital standards. This poses systemic risk in terms of market related liquidity under stress in part because the leverage ratio is a default credit-risk charge for sovereign obligations in the absence of a meaningful risk-based buffer. Sovereign exposures generally carry zero weighting because the political obstacles to effective global standards have proven insurmountable, but the leverage ratio for sovereign or quasi-sovereign obligations is punitive when considered on a risk-adjusted capital basis and with regard to the return on these low-risk investments.

As a result, banks minimize holdings of assets subject to the leverage ratio, giving them smaller cushions of high-quality assets that can be quickly converted to cash or other purposes that stabilize illiquid markets. This was seen in 2019 during the repurchase-agreement crisis and again in 2020. In addition, the capital cost of the leverage ratio reduces the capital banks have available to make loans or otherwise support economic growth and equality.

As a result, supervisory standards related to critical risks in this sector (e.g., concentration, liquidity, market, operational) should be introduced and enforced and the leverage ratio reduced in favor of sensible risk-based weightings for high-quality liquid assets as defined in the liquidity rules, including central-bank deposits. An alternative would be to adjust the U.S. leverage ratio to the lower level set in global capital standards, but doing so would require a change in U.S. law that is most unlikely in the near or even long term.

Credit Risk

Credit risk-based capital is designed to offset the risk related to loans and similar exposures based on regulatory assumptions and/or internal models about the probability of loss and loss given default. This is of course a major source of risk to many banking organizations and thus an area where risk analytics are well developed. However, novel assets such as cryptoassets are not captured because the credit-risk capital construct is unwieldy and very slow to change. Supervisors count on capital cushions, but they devote years to negotiating modifications – see for example the losses realized even though subprime mortgages were a known risk well before the 2008 crisis. Implicit or "Pillar 2" supervisory capital add-ons intended to address problems with hard-wired risk weightings are rarely used and of uncertain value in contrast to rapid supervisory intervention as risk tolerances are breached.

The standardized approach (SA) to credit risk not only misses emerging risks, but also penalizes known assets – e.g., purchase mortgages – for non-traditional customers (e.g., low-and-moderate income households) who characteristics do not fit into standardized models. This has proven, adverse equality and growth implications. Credit risk-based capital standards are also unduly complex even in the SA because regulators don't trust banks to set internal models objectively and they don't trust themselves to spot rapid risk build-ups not fully buffered by SA requirements.

Further, the advanced approach to credit-risk capital required now only of the largest and most complex banks adds complexity and cost with little resulting benefit. The advanced approach should be removed, the SA should be far simpler, and the leverage ratio should as noted be better trusted and calibrated to capture credit risk in an effective, stringent, forward-looking fashion.

One reason the current credit-risk framework is so complex is that regulators use it as a default check on the other risks inherent in exposures captured by the credit-risk rules and its sister standard designed to capture similar risk related to market-trading activities. These ancillary risks include those related to compliance, implicit recourse (when banks take credit losses rather than lose face), and interest-rate changes. These risks are buffered by the leverage ratio and best captured by direct supervisory standards, not implicit capital requirements often insufficient when poor supervision allows banks to take undue risk for which credit-risk standards are ill-designed and the leverage ratio maybe far too low.

Operational Risk

A complex body of capital rules applies to operational risk (i.e., that related to natural disasters, fraud, human error, legal costs) even though its ability to actually measure probability of loss and then its likely amount has long been at best uncertain. Because regulators know capital is an imperfect operational-risk buffer, they have also imposed numerous operational-risk requirements (e.g., contingency planning, systems resilience). However, these proven risk buffers are low supervisory priorities except in the wake of incidents. Regulators hope that operational risk-based capital suffices, but it has not proven useful in meaningful ways as a risk buffer above and beyond that on hand under the broader capital framework. Indeed, to the extent that operational risk-based capital diverts resources from operational risk mitigation, it exacerbates risk exposures, especially under stress. Operational risk-based capital can also be so costly that it accelerated the migration of asset management outside the regulated-banking sector.

There are also significant external ways to buffer operational risk – e.g., insurance – but neither these nor other resilience buffers are given much credit in the operational-risk capital calculation, creating a disincentive to effective risk mitigation. Greater reliance on supervision and enforcement along with a clear body of operational-risk standards expressly designed to ensure operational-resilience under stress is a more effective risk buffer than arbitrary, retrospective capital requirements.

Stress testing can also be applied in this arena by, for example, requiring banks to demonstrate resilience under conditions such as severe power outages, cyber-attack, and very large legal settlements. Rules already require contingency planning and demonstrable ability to recover. If these are insufficient, then regulators should review them rather than lard the capital standards with additional costs likely only to undermine effective infrastructure investment and resulting resilience.

Other Risks

The ineffectiveness of capital as a cure-all is evident also with regards to climate risk. There is much talk among global regulators and U.S. Members of Congress about imposing either "brown penalty" and/or "green-incentive" risk-based capital charges. So far, global regulators have eschewed any specific action on climate-risk capital weightings and U.S. regulators prefer, at least for now, high level supervisory principles and, over time, scenario analysis. However, as climate-risk data become better understood, calls will grow for express climate risk-based capital weightings, a requirement that will continue the disintegration of capital requirements into competing pieces with uncertain relationship to meaningful risk mitigation unless a more holistic approach to regulatory capital quickly emerges.

It might be said that the largest banks are governed by a holistic-capital standard by virtue of a stress capital buffer (SCB) designed to judge risk-based capital rules under the extreme stress evident in the FRB's supervisory stress test. However, these stress tests measure only credit- and market-risk capital, omitting the leverage ratio, operational risk, and the implications of liquidity and other potentially systemic stress.

As a result, the SCB is not holistic; rather, it's an additional layer of vigilance that may correct for some of the flaws in the capital rules by ensuring banks remain solvent under one or another seriously adverse scenario. Key to making the SCB a holistic capital charge would be not only dynamic, real-time testing and a new approach to defining allowable hedges, forms of credit- and operational-risk insurance, and better buffers against contagion risk reaching into banking from nonbank financial intermediaries. The balance between the SCB and yet other big-bank capital requirements – GSIB surcharges and total loss-absorption capital standards – is also essential. Now, the only way to know how much capital big bank holds is to look at a long list of line items that provides no insight into how well which risks are buffered under what scenarios.

Next Steps

It's not news that the current bank-capital framework is complex, model-dependent, and unreliable. One prominent global regulator has in fact gotten considerable attention via a suggestion that the current standards be scratched in favor of a simple leverage ratio and a lot of supervisory discretion. However, this would bring capital regulation back to the early 1980s, when most nations had a small leverage charge and few supervisory controls on the largest banks seen as essential to national economic prosperity, banking-system competitiveness, and even national security.

It is likely that, in the absence of global safeguards, national authorities will return to these same geopolitical priorities given heightened fragmentation in geofragmented power blocs akin to those that dictated policy forty years ago, sounding the gun for yet another race to the bottom. For all the ambiguity and even evasion, global rules have nonetheless created best practices to which regulators in many major markets now hold themselves at least partially accountable. If rules were more transparent, then accountability would be readily apparent – complexity obscures accountability and "false-science precision" all too often obviates effective supervision.

As a result, it is clear that capital standards should continue to be crafted via specific, transparent, and hard-wired rules set at minimum, measurable levels by global consensus then transparently measured and reviewed by national authorities. This does not mean that national standards can or should hue to every jot and tittle in global rule. Global standards are still more of a piecemeal construct than the U.S. rules outlined above and many of the compromises needed to craft them – see above re sovereign obligations – undermine their effectiveness. However, a global construct of basic minimums and core methodologies prevents another unbounded race to the bottom and thus must set basic parameters for national action.

Going beyond these bottom lines to a more holistic construct that uses capital for what capital is good for and supervision where it is not eliminates much of the current complexity and enhances systemic resilience in concert with heightened capacity for banks to serve as critical financial intermediaries. However, this beneficial result is possible only if the supervisory standards better suited for many risks are also set in a measurable and transparent fashion. To date, capital rules are awash with details down to the decimal point even as supervisory standards are often kept at the "high-level" stage in which boards of directors are urged to be vigilant about one or another risk and supervisors are encouraged to hold banks accountable in some way at some time. Express concentration, counterparty, and risk-tolerance limits judged by forward-looking scenario analysis and retroactive performance criteria would lead to enduring risk-management cultures because the penalties for failure would be at least as severe as those associated with failing a capital-based stress test. Supervisory sanctions are often retroactive, but they are nonetheless effective if included in a systematic construct comprised of sensible leverage and risk-based capital rules, stress testing, early intervention, and public disclosures.

There is nothing relaxed about bank supervision that ensures meaningful risk management through a combination of minimum and meaningful capital rules, tough liquidity standards, real-time stress testing, and scorching resolution planning backed by effective enforcement actions. And, to make this still tougher and better, there should be market discipline achieved through public disclosures of supervisory actions, ratings, and other factors in order to hold both banks and their supervisors to account.

The most effective of the capital requirements and stress testing that ensure its resilience would remain very much in place under this new regime. However, a holistic approach that uses capital rules to counter the risks for which they are well designed instead of hoping that more capital conquers all crises will result in banks that are safe in a financial system sound enough to promote growth with far less risk of continuing financial crises as long as bank supervision does its job and agencies quickly and meaningfully enforce their requirements when banks go astray.