

Banking and Risk Practices

Banking system resilience in the time of COVID-19

Capital cushions at European, UK, and US banks look adequate in most scenarios—and challenged in others. In either case, they must be rebuilt, and that will require some difficult decisions.

This article is a collaborative effort by Kevin Buehler, Miklós Dietz, Federico Fumagalli, Cindy Levy, Susan Lund, Olivia White, and Eckart Windhagen, representing views from McKinsey's Banking and Risk practices.



The recession of 2008–10 was triggered by a shock in the banking system. In fact, many economic downturns in the past 50 years, such as stock-market crashes and debt defaults, had financial-system origins. The current recession is different: it was triggered by a global pandemic, governmental and societal responses to it, and the resulting shocks to supply and demand.

But that does not mean that banking is not affected. The industry has already felt massive effects from the crisis, with more to come. And, as our colleagues have written recently, the banking systems in both Europe¹ and the United States² have roles to play in getting the economy back on track—for example, by providing loans to businesses that have suffered.

How effective a bank-supported economic recovery will be, however, depends on banks' resilience and health. Losses from loan defaults and increases in risk-weighted assets will deplete banks' capital. The extent will depend on the spread of COVID-19 and the effectiveness of the public-health response and mitigating interventions. Our new research considers three scenarios that business executives around the world consider most likely. We find that in two milder scenarios, in which GDP does not recover to its previrus level until 2021 or 2023, \$100 billion to \$400 billion in common equity tier-1 (CET1) capital would be wiped out in Europe, the United Kingdom, and the United States.

The good news is that the European and US banking systems in aggregate can withstand damage on that scale, though individual banks may not fare so well. Entering the crisis, CET1 ratios³ were 13 percent in Europe, 14 percent in the United Kingdom, and 12 percent in the United States. Should one of the two milder scenarios prevail, those ratios would fall to 8.5 to 10.0 percent in Europe, 11 to 13 percent in the United Kingdom, and 8.0 to 10.5 percent in the United States, all above regulatory minimums (standards that have seen some recent flexibility from regulators). Some institutions would slip below the minimums, perhaps to a level that threatens their

viability, but the systems themselves would survive. In either of these scenarios, the prudential regulation of the past ten years will have succeeded—an achievement worth celebrating.

However, the milder scenarios are by no means a sure thing. Banks are taking massive provisions, and offering negative guidance for coming quarters. Should the more-pessimistic scenario take place, bank capital could fall by as much as an additional two to three percentage points, bringing the CET1 landing point close to 5 to 6 percent.

In any scenario, banking executives must prepare for the next normal to be very different from that of the past ten years. Banks in mature economies have built significant capital buffers and operate in what we call the “cushion zone.” In coming months and years, banks might pass into the “caution zone” and need to significantly change the actions they take to preserve and raise capital, and decisions about dividends and buybacks, compensation, and cost structures need to be reexamined. The level and type of support that banks are able to provide to the real economy would also come under scrutiny, given their tighter capital positions.

One of several expensive lessons of the global financial crisis is that building banks' capital is not optional but a requirement. Other lessons include the speed at which the financial system's plumbing can become clogged, the rapidity with which liquidity can disappear, and the difficulty of selling assets in a plunging market.

In this article, we share our research on capital losses; explain the actions that banks might consider taking to rebuild capital as they move from the cushion to the caution zone, and possibly even into the “danger zone,” in which a bank's viability is in jeopardy; outline the ways that government can team up with banks to jointly propel the economic recovery; and offer some guidelines for executives to help navigate banking's next normal. This article

¹ Matthieu Lemerle, Debashish Patnaik, Ildiko Ring, Hiro Sayama, and Marcus Sieberer, “No going back: New imperatives for European banking,” May 18, 2020, McKinsey.com.

² Kevin Buehler, Miklós Dietz, Marie-Claude Nadeau, Fritz Nauck, Lorenzo Serino, and Olivia White, “Stability in the storm: US banks in the pandemic and the next normal,” May 13, 2020, McKinsey.com.

³ Common equity tier-1 capital/risk-weighted assets.

is the first in a series designed to provide a broad perspective on the economic impact of COVID-19 on banks, companies, financial markets, and policy makers.

Capital losses will likely be severe but sustainable

We have surveyed a panel of 2,000 global executives monthly about the potential scenarios that they deemed most likely (Exhibit 1),⁴

Here, we focus on three scenarios that executives said are likely. Scenario A1, considered the most likely, entails a muted world recovery by 2023.

Scenario A3 reflects more optimism about the virus's spread and the public-health response, foresees recovery by 2021 (this scenario may still be possible for parts of Europe, but appears highly unlikely for the United States). Scenario B2 reflects greater pessimism about the effectiveness of the public-health response.

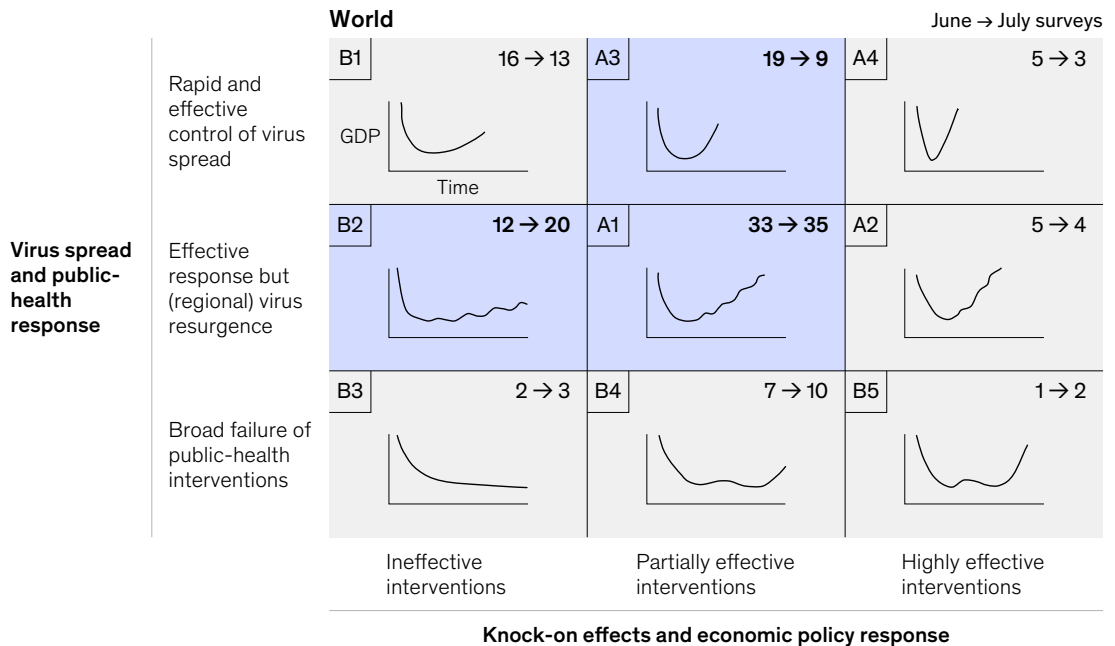
Consider first the two milder scenarios, A1 and A3. (Not all regions will necessarily experience the same scenario.) In mature economies, we expect reductions in CET1 ratios of one to five percentage points, depending on the scenario and geography (Exhibit 2). Loan-loss provisions and increased risk-weighted assets are the primary sources of loss.

⁴ "The coronavirus effect on global economic sentiment," July 27, 2020, McKinsey.com.

Exhibit 1

Global executives indicate three likely scenarios.

Likelihood of scenarios for the global economy, % of total respondents¹



¹ Monthly McKinsey surveys: June 2020, n = 2,174; July 2020, n = 2,071.

Exhibit 2

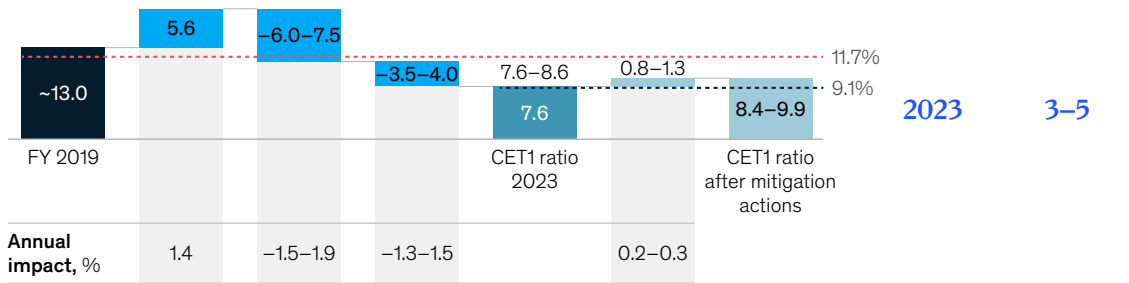
In the moderate and mild scenarios (A1 and A3), capitalization looks adequate.

**Common equity tier-1 (CET1) ratios
2019–23, %**

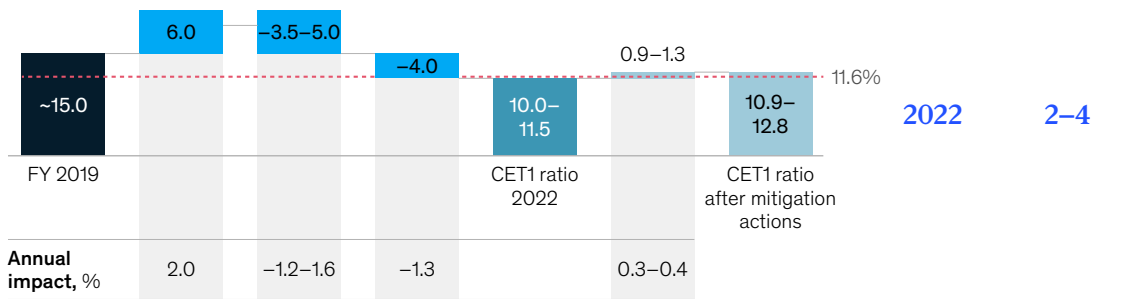
----- Minimum regulatory requirement (2019)

----- Minimum regulatory requirements after 2019 SREP¹

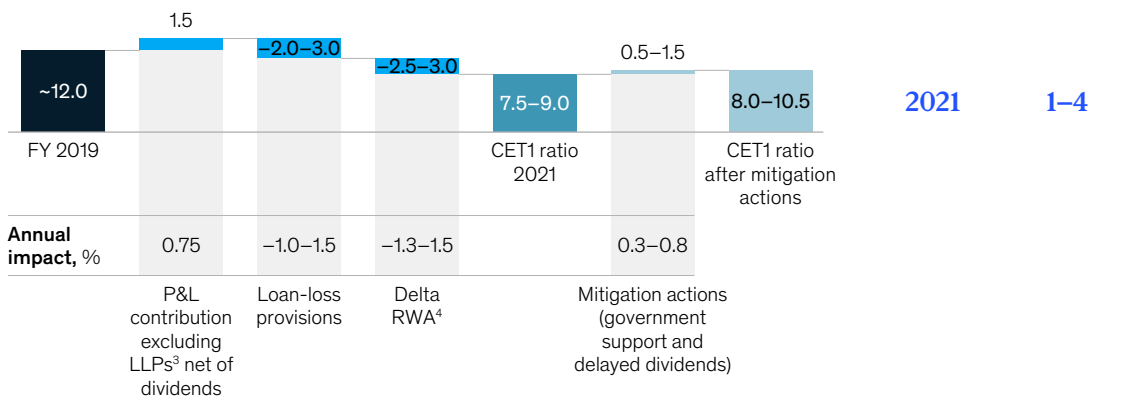
Europe (France, Germany, Italy, Spain) **Year of lowest capital level** **Capital depletion, pp²**



United Kingdom



United States



¹The 2019 Supervisory Review and Evaluation Process provided some flexibility and relief in capital requirements.

²Percentage points.

³Loan-loss provisions.

⁴Risk-weighted assets.

These figures represent a significant reduction of current capital buffers, with potentially severe consequences (see sidebar “Two precedents: Greece and Italy after 2008”), but the capital reduction we estimate in these two scenarios will not generate major problems of sustainability for the European and US banking systems, though they will be affected differently.

If, instead, scenario B2 materializes, the impact would be much greater, as the recession would last until 2025 or later (see sidebar “Prepare for the worst: How bank systems could enter the danger zone”). The CET1 ratio in the banking system of mature economies could be reduced by an additional two to three percentage points. This would result in system-wide capital well below regulatory minimums.

Two precedents: Greece and Italy after 2008

What will the capital shortfalls we anticipate in the milder scenarios mean? For comparison, consider the equity injected into Italian financial institutions after the global financial crisis, as GDP growth fell more than five percentage points. Public and private sources added about €65 billion, equivalent to two to three percentage points of common equity tier-1

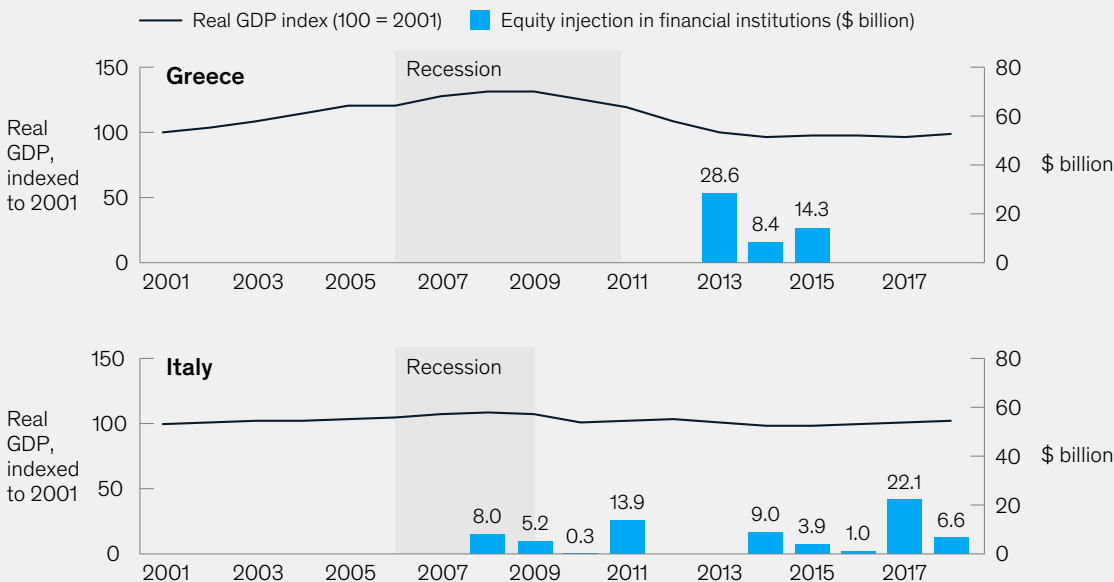
(CET1) ratio. Similarly, after the prolonged recession in Greece, more than €50 billion of equity, the equivalent of eight percentage points of the CET1 ratio, was injected (exhibit).

Stabilizing the banking system was deemed one of several steps needed to restart growth. But even the substantial capital

injections made after 2008 were not enough to revive growth. To this day, GDP growth in Greece has not returned to the level in 2008. More than a decade of growth has been lost. The current crisis could have a comparable impact on the entire European, UK, and US banking industries.

Exhibit

Italy and Greece recapitalized their banks after 2008.



Source: Capital IQ; OECD

Prepare for the worst: How bank systems could enter the danger zone

Many executives favor a relatively optimistic scenario, in which GDP recovers to its precrisis level by 2023. However, nearly 60 percent of global business executives who responded to our survey believe that a more dire scenario is most likely. This could happen, for instance, if an effective vaccine is not developed or widely available in 2021 or 2022. Skeptics point out that there is still no effective vaccine for HIV—30 years after that pandemic began. Repeated resurgences of the novel coronavirus that require prolonged and widespread stay-at-home measures could turn temporary furloughs into permanent layoffs, hitting household income and sending more companies into bankruptcy. Many bank assets would deteriorate and their risk weights rise. And subdued economic demand across sectors would reduce banks' income.

Scenario B2 describes many of those possibilities (other "B" scenarios also envision pessimistic outcomes; see Exhibit 1 on page 3). If scenario B2 materializes, the impact on the banking system would be widespread and severe. In this scenario, eurozone and US

GDP would not recover to previous levels until after 2025. The CET1 ratio in the European and US banking systems would be reduced by four to seven percentage points. In both regions, system-wide capital would fall well below regulatory minimums and enter the danger zone. A significant portion of individual banks would likely see their capital wiped out, requiring either government intervention or bankruptcy. This is particularly true for smaller banks with heavy exposure to commercial real estate or other unsecured lending. For all banks, this scenario would require immediate and large reductions in costs (including layoffs and compensation), an end to dividends and buybacks, and additional capital raising. Should these problems become widespread, a banking crisis could follow.

For now, banking systems are stable, thanks in large part to the \$13.5 trillion that governments have committed to households and businesses in the form of pandemic relief—with more on the way, as seen in the European Union's €750 billion stimulus package, announced July 21, 2020. But if consumer spending and investment remain in the doldrums for many more

months, the ability of governments to prop up incomes will end and a wave of defaults will ensue. An adverse scenario like B2 would likely end the ability of banks to support economic recovery; indeed, they could become an additional major source of distress.

This last aspect is crucial, and something that governments could aim to influence directly. As one of the key transmission chains of government support to the real economy, banks have been asked to play an unprecedented social role in the pandemic, and the effectiveness of this mechanism will be a core determinant of the speed and extent of government stimulus success.

At the time of writing, this dire scenario is not the most likely outcome for Europe, the United Kingdom, or the United States—but its probability is not zero. Banks and governments should be creating a playbook to manage this outcome and watching a dashboard of both public-health and economic indicators to look for early warning signs.

It would require significant and immediate reductions in costs and compensation and a suspension of dividends and share repurchases (a step the Federal Reserve already took for big US banks in the third quarter of 2020)—and possibly additional capital raising.

European, UK, and US financial systems differ in critical ways, which makes comparing their capitalization levels difficult. Their social-safety nets and accounting practices differ quite a bit as well; many EU countries have more-comprehensive systems, while US banks tend to reserve for losses faster than their European peers do. Put those

factors together and, in our view, US banks' capital will be hit sooner but will recover faster. Their capital reserves will reach a low point in 2021, according to our estimates. On the other hand, European banks' losses will be distributed over time; in our estimate, their capital reserves will not reach its nadir until 2023 or 2024. The United Kingdom sits in the middle, reaching the low point in 2022.

In any scenario, several factors could influence the impact. First, actual economic developments could be worse than those currently expected. Unemployment in the United States, for example, already seems to have exceeded initial expectations.

Another factor is the effective default rates of companies, given the unprecedented nature of this crisis. A third factor: our estimates consider only the governmental measures that benefit the banking system directly (such as moratoria, credit guarantees, and capital-relief measures). But it can certainly be argued that many other measures benefit banks indirectly, and it is possible that governments and supranational institutions would take additional steps to further alleviate the extent of the shock on the real economy.

the United States. In that light, the projected landing points under scenarios A1 and A3 of 8.5 to 10.0 percent in the European Union, 11 to 13 percent in the United Kingdom, and 8.0 to 10.5 percent in the United States demonstrate the resilience that the global banking system has built (Exhibit 3). But they may also mark the end of a ten-year journey in a cushion zone, in which banks have held a comfortable level of capital. In scenario A1, more than \$400 billion in capital accumulated by European and US banks over the past ten years would be wiped out.

What if a banking system moves from cushion to caution?

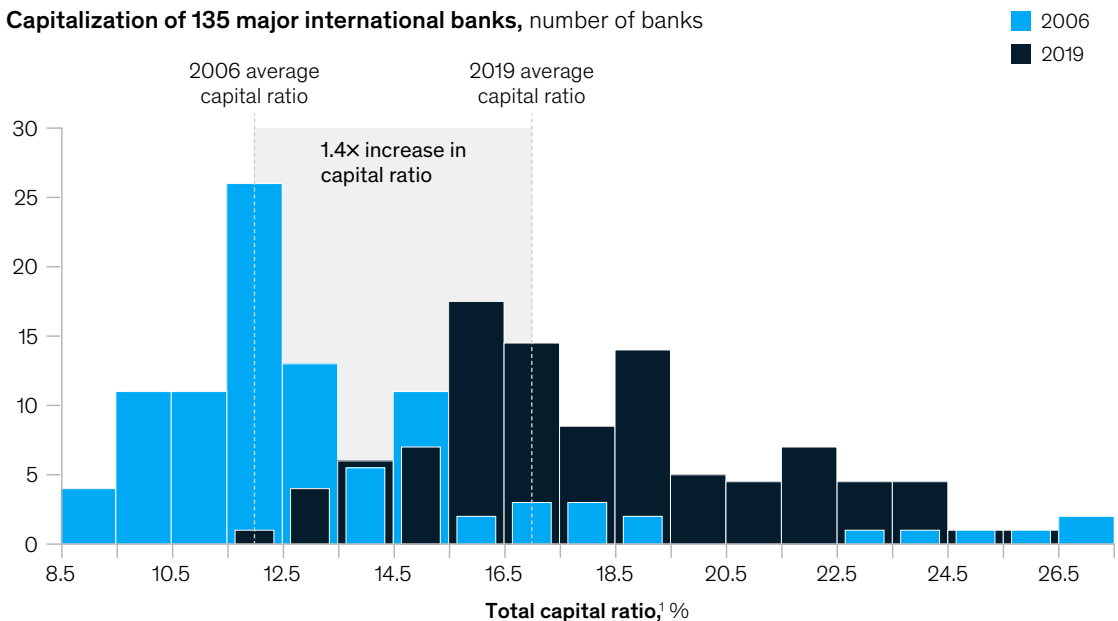
Entering the global financial crisis, CET1 ratios were 6 to 8 percent in Europe, the United Kingdom, and

As the pandemic continues, the banking system may enter what we call a caution zone, with a CET1 ratio of about 8 to 10 percent, in which banks must start to rebuild their cushions and take other steps as

Exhibit 3

Capital ratios have increased 1.4 times since the mid-2000s.

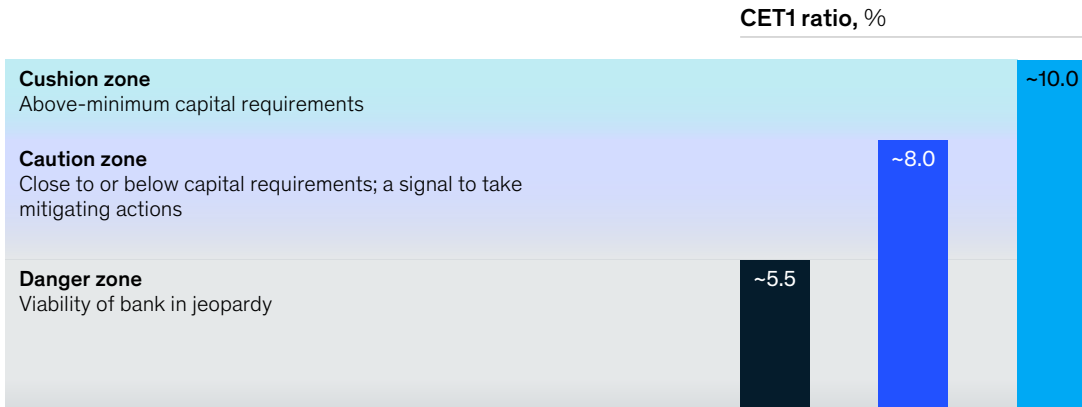
Capitalization of 135 major international banks, number of banks



¹Total capital ratio = own funds over total risk-weighted assets, with own funds = common equity tier-1 capital + alternative tier-1 capital + tier-2 capital. Source: *BIS Bulletin*, No. 11, May 2020; FitchConnect

Exhibit 4

The common equity tier-1 (CET1) ratio places a bank in one of three zones.



Note: Cushion, caution, and danger zones depend on the capital requirements of individual banks or banking systems.

well (Exhibit 4). And, while the overall banking system seems sufficiently resilient, individual banks and possibly entire regional systems could enter a danger zone, reached at a CET1 ratio of about 5.5 percent.

In the caution zone, banks will first need to understand exactly where they stand, through monthly or even weekly stress tests. Many will find that they need to improve their health, starting with rebuilding at least part of their capital buffer. Not only does the buffer provide resilience, as the COVID-19 crisis is proving, but markets have become increasingly aware of the importance of a capital cushion to withstanding external shocks. Capital formation won't be easy, of course, with falling revenues and profits. Our research shows that capital formation from retained earnings will drop from a level equivalent to 0.5 to one percentage point of CET1 yearly to only 0.2 to 0.5 percentage point, thus making organic recapitalization much slower. Raising private capital

will also be difficult. Banks should therefore consider taking a series of actions, some tactical and others structural.

Given the scarcity of available capital, banks will most likely need to reduce their dividend payouts and stock buybacks and introduce compensation caps. They also will likely need to tighten their credit policies. Depending on target CET1 ratios and dividend policies, banks could have capital to support between \$1 trillion and \$5 trillion of additional loans, according to a study by the Bank for International Settlements.⁵ That may not be enough to meet their local economies' needs and could generate a new credit crunch.

Banks might reduce exposure to noncore activities that absorb considerable capital—for example, by exiting some businesses such as investment banking, limiting international expansion, or reducing exposure to sovereign debt.

⁵ Ulf Lewrick, Christian Schmieder, Jhuvesh Sobrun, and Előd Takáts, "Releasing bank buffers to cushion the crisis—a quantitative assessment," Bank for International Settlements, *BIS Bulletin*, Number 11, May 5, 2020, bis.org.

While most banks have already run substantial cost-cutting programs, some may look to achieve further cost efficiencies by, for example, shutting brick-and-mortar branches and migrating customers to other service channels. Banks must take care, however, not to jeopardize long-term relationships with their customers.

With differences in banks' health and capital positions becoming starker, M&A will likely increase, depending on regulatory approval. Tie-ups within the United States and especially within the European Union will become attractive, accelerating the consolidation of the industry. Some cross-border mergers might make sense (as will divestitures for some banks in the danger and caution zones). A would-be acquirer should build a business case on its ability to supply credit to the weaker bank's customers, thus preserving productive output in the real economy. M&A will also involve cutting costs, an important second-order effect that must be

communicated to regulators. The merged bank might not be as large as the original pair, but it will be more economically powerful.

Will banks enter the danger zone?

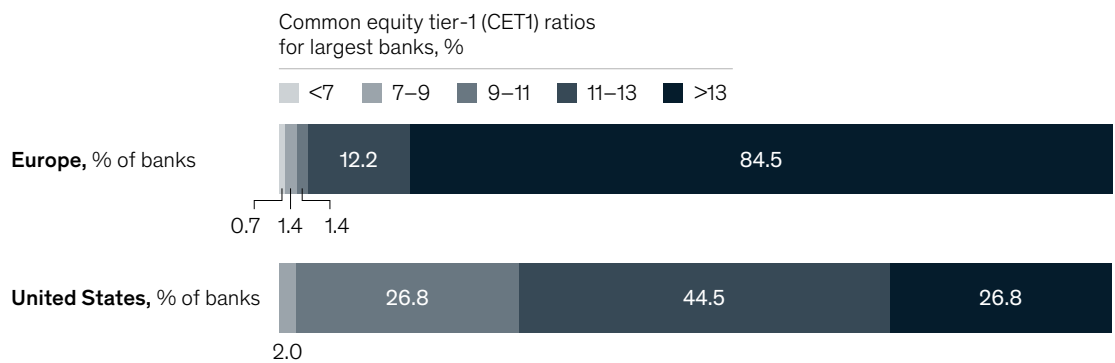
Even in the milder scenarios we have considered, some individual banks could enter the danger zone, in which their viability is at issue. And should one of the more-pessimistic scenarios, such as B2, take hold, many more banks would follow. Our research suggests that even in the milder scenarios, about 1 percent of banks in mature economies might enter the danger zone, and up to 65 percent might drop into the caution zone.

The situation will likely differ for European and US banks. On one hand, a larger share of European banks entered this crisis with a sizable capital buffer that will keep them in the cushion zone (Exhibit 5). And, as mentioned, the impact in the United States

Exhibit 5

More of Europe's largest banks are well capitalized.

Capital ratio distribution for largest European and US banks by assets¹



¹Figures may not sum to 100%, because of rounding.
Source: Capital IQ

will be front-loaded and fully realized by 2021, in our estimate, while European banks will distribute the impact over three to four years.

On the other hand, US banks are also likely to recover more quickly, and not only because they take loan losses sooner. US banks are more profitable than their European peers and will be able to retain a greater share of their earnings to rebuild their cushions. In fact, the profitability gap might increase if Europe's monetary responses and economic recovery are less effective than those of the United States. Indeed, the prospects for return on equity (ROE) differ between the two geographies, in our estimate, with European banks' ROE staying well below cost of capital until 2025 and US banks returning to precrisis levels of ROE by 2023.

Which measures should governments consider?

In the dark days after the 2008 crisis, national and supranational regulators took stock of the system and imposed stringent new capital requirements, stress tests, and other means of building resilience. Many bank leaders grumbled about the new rules at the time, but no one is complaining now. The macroprudential reregulation of the banking system has succeeded, and, in our estimate, looks like it will be sufficient for most outcomes of the COVID-19 crisis.

Now, with bank capital reserves falling, even more such cooperation is needed (for the range of moves that banks, governments, and central banks might consider, see sidebar "A playbook to navigate the different capital scenarios"). Banks and governments have already come together in certain ways; for example, US banks are delivering government relief funds through the Paycheck Protection Program. But both banks and governments could benefit by becoming more tightly integrated, particularly to deal with the problems of lending in a pandemic.

Even if a credit crunch can be avoided, banks will tend to allocate their limited capital to only the most profitable loans. As a consequence, governments

may want to consider providing banks with incentives to support specific segments of clients and sectors (such as vulnerable members of society, small businesses, and sectors like sustainable energy) that are not necessarily those that banks would support from a pure risk-return point of view. Incentives can only go so far, but they may be a relevant tool to boost economic growth. In practice, they would require setting up a governance mechanism whereby banks and governments work closely to share the most up-to-date intelligence and data on how different sectors of an economy are faring and the amount of productive capacity that still merits support.

Another area of collaboration is the capital cushion. Given the impact of COVID-19, governments and central banks may want to take steps, as they did in the last crisis, to keep banks from slipping into the danger zone. For example, governments could consider supporting industry-wide "bad banks," which would absorb banks' worst-performing assets, and keep the originating institutions focused on supporting the future productive output of the real economy.

A third area is M&A regulation, which governments and regulators will be rightly cautious about, of course. They can play a role in shaping the direction of the industry by encouraging strong banks to acquire weaker ones, making tough choices on failing banks' resolution mechanisms, and so on.

Finally, governments and banks can come together to understand some of the unwanted effects of monetary policy. In recent years, EU banks (and many others) have put on the so-called carry trade by borrowing domestically, often at zero percent or below, and investing in bonds of other countries that provide some yield and have no regulatory-risk weight. Persistent low rates (with the possibility of even lower ones) might spur more such carry trades and an increase in government debt on banks' balance sheets. On one hand, governments have an incentive to support this carry trade, as it lowers their own borrowing costs. On the other hand, it also would reduce the bank capital that would be available to support the real economy.

A playbook to navigate the different capital scenarios

Depending on the scenario that materializes, and on banks' institutional resilience, they could end up in any of the three zones: cushion, caution, or danger. In each zone, banks, governments,

and central banks and regulators could launch a series of actions to navigate effectively (exhibit). Several of these steps result from lessons learned from the 2008 global financial crisis.

Exhibit

The actions of banks, governments, and regulators will depend on the zone banks are in.

	Banks	Governments	Central banks and regulators
Cushion zone	<ul style="list-style-type: none"> – Increase market share, taking advantage of market turmoil – Consider M&A opportunities – Preserve and possibly further strengthen capital buffer 	<ul style="list-style-type: none"> – Evaluate degree of support for market consolidation – Continuously evaluate effectiveness of support measures 	<ul style="list-style-type: none"> – Assess, using system-wide and bank-specific stress tests, resilience of the system as the COVID-19 situation evolves – Periodically reassess adequacy of the expected eased regulatory rules
Caution zone	<ul style="list-style-type: none"> – Reduce dividend payouts and stock buybacks – Achieve cost efficiency and introduce compensation caps – Tighten credit policies – Evaluate reduction of exposure to noncore activities 	<ul style="list-style-type: none"> – Introduce or strengthen incentives for banks to support specific segments and sectors – Promptly identify plan for banks to get close to minimum capital requirements 	<ul style="list-style-type: none"> – Support the regular functioning of financial markets (eg, liquidity, bond purchases) – Tightly monitor evolution of the economic situation and resilience of the banking system – Evaluate further easing of regulations
Danger zone	<ul style="list-style-type: none"> – Trigger bank-specific recovery plans – Manage possible liquidity shocks – Immediately reduce costs and compensation – End dividends and buybacks – Evaluate conversion of debt into capital and additional capital raising 	<ul style="list-style-type: none"> – Build systemically bad banks to absorb banks' worst-performing assets – Trigger contingency plans to support ailing banks 	<ul style="list-style-type: none"> – Ensure financial-market continuity through further liquidity support and possible capital support options – Closely monitor banks' execution of recovery and, possibly, resolution plans

Note: Banks may be in one zone and their financial systems in another.

A banking system outside the cushion zone will have decisions to make

The cushions that banks have built since 2007 have worked well. In our estimate, capital buffers will allow the banking system in mature markets to withstand the COVID-19 crisis under the most likely scenarios, A1 and A3. But the system will be damaged and must be repaired. As banks slip from cushion to caution, and even into danger, they must answer these questions, in concert with governments and financial regulators:

- *Is it better for national economies to accept the caution-zone approach outlined in this article, which many banks will likely follow if not provided different incentives? Or would economies be better off if banks continue to lend, depleting their capital further? It is a fine line, one that must be walked carefully to avoid the danger zone, and to keep alive the potential for banks to attract private capital.*
- *When is the right time to return to the cushion zone? Banks are serving as a shock absorber for the economy; continuing to serve that function would mean putting off a return to the cushion zone. However, banking-system buffers must be restored quickly enough to be ready for the next recession. Bearing in mind that it took ten years to build the current cushion, countries cannot risk waiting too long, lest they enter the next recession with a weak banking system.*
- *How big should the new cushion be? Regulators have used stress tests in the past to determine minimum capital requirements. Banks entered*

this crisis with a further buffer on top of this, and yet some banks in mature economies will use up most of these ample buffers and stray close to the danger zone. Is the current crisis the new baseline for economic shock? Or is it a tail event, one that is highly unlikely to recur? Finding the right size for new capital requirements will require answers to questions such as these: Should banks be required to withstand shocks of this magnitude? Or is this task better performed by governments and central banks?

- *Will governments need to take a more active role in financial markets? It's possible to imagine a future when governments adopt a more extensive policy-making role—for example, by defining when a company needs loans as opposed to equity. Such a role would require working closely with banks to jointly support the economy; for example, banks could provide information on sectors, and governments could provide policies that identify which sectors to support and when to support them.*

The economic impact of the COVID-19 pandemic has already been tremendous, and it will have further effects as the situation evolves. Banking systems seem adequate to the challenge, in most scenarios. But whatever the next normal proves to be, if banks are to support an economic recovery, they must leave behind business as usual.

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The authors wish to thank Ingrid Lagae, Lindsay Purcell, and Mario Nargi for their contributions to this article, which uses data and insights from Panorama, McKinsey's proprietary banking research arm.

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