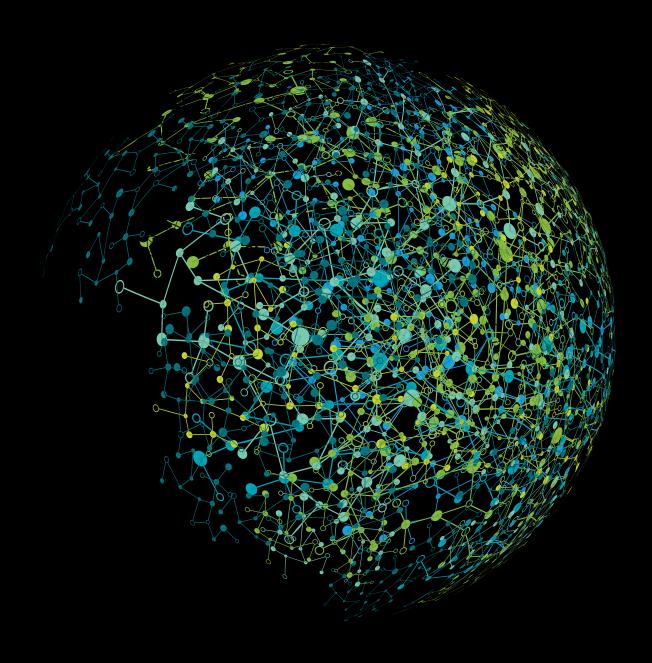
Deloitte.



COVID-19

The impacts on global residential mortgage markets



Contents

Executive summary	2
What challenges does COVID-19 present to mortgage lenders?	4
How have governments responded to support residential mortgage markets?	8
What have mortgage lenders done to respond to the crisis?	14
Conclusion	32
Appendix	34



Executive summary

As the COVID-19 crisis deepens across the globe, its impact on the financial services sector and individuals' wealth and debt levels is becoming more severe. For individual homeowners, mortgage debt is the single largest source of debt, and has the greatest impact on their finances and their ability to stay solvent through wage decreases or wage losses. For lenders, residential mortgages are typically the most significant asset on their balance sheet, and thus changes in originations, repayment schedules, and default rates have significant impacts on lenders' profitability and liquidity. As such, maintaining the continued health of the global residential mortgage market is critical to ensuring that countries can recover from, and thrive after, the COVID-19 crisis.





Institutions globally are grappling in similar ways with the acute stresses COVID-19 has placed on their operating models, their earnings, and their balance sheets. However, growth and recovery will not be uniform. The best-positioned institutions will be able to fortify their businesses today, rapidly adapt to digital operations, proactively support customers, and take advantage of growth opportunities as they arise.

Deloitte's Resilient Leadership framework defines three timeframes of the crisis: Respond, Recover, and Thrive. In this paper, we explore the "Respond" and "Recover" phases of the COVID-19 pandemic across global residential mortgage markets.

We outline the challenges faced by lenders, and how both governments and leading institutions are responding to the crisis and recovering. We explore global economies with large residential mortgage markets and significant exposure to COVID-19, including Australia, Canada, China, Europe, Latin America and the Caribbean, the United Kingdom, and the United States. We conducted interviews with major lenders and Deloitte experts across these regions and conducted secondary research on the latest developments on COVID-19 and the residential mortgage market.

Deloitte's Resilient Leadership framework defines three timeframes of the crisis

RESPOND



RECOVER



THRIVE

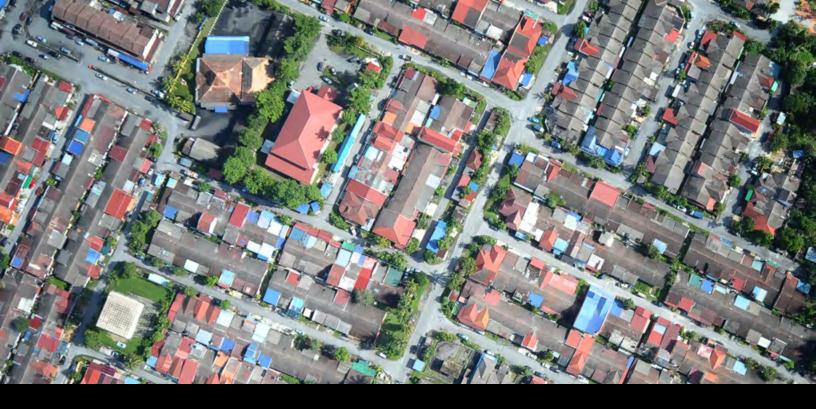


Manage continuity

Learn and emerge stronger

Prepare for the next normal

Focus of this document: The immediate impacts of COVID-19 on global residential mortgage markets.



What challenges does COVID-19 present to mortgage lenders?

COVID-19 presents the biggest challenge to global mortgage markets since the 2008 financial crisis, and mortgage lenders are taking decisive and strategic action to adapt. Some of the challenges will be temporary and short-term, while others will create seismic shifts that take years to overcome (e.g., fundamental changes to credit risk profiles). These operational and financial challenges represent an opportunity for lenders that are able to break the inertia of business models and adapt at a rapid pace.

In the immediate term, lenders have had to shift focus from their past priorities and projects to deliver an organization-wide response to COVID-19 and its implications. This has required a change in market-facing activities and, often, a reallocation of employees and resources. For example, National Australia Bank (NAB), Australia's third-largest mortgage lender, announced that it will stop work on about 100 projects almost immediately as it focuses its efforts on addressing a significant increase in customer inquiries.1 The bank has reported it is continuing only those projects that are essential to its survival, including ones related to system resilience, digital access, the provision of credit, and providing relief for employees at the front line. Many customer inquiries have been originating from elderly customers who need additional support in light of branch closures. As a result, NAB has been challenged to proactively call a vast number of these customers to help them transition from passbooks to online and digital banking.

In responding to borrower challenges and the resulting government-mandated deferral programs, many lenders are facing large volumes of customer relief requests that require adequate operational capacity and flexibility. In Italy, the federal government decreed that Italian banks must provide borrowers with the option to suspend payments on mortgages and other eligible outstanding loans. Banks were required by law to inform borrowers, by the end of March, about their right to payment suspensions. At the same time, banks are also being challenged to prevent small- and medium-sized enterprise (SME) customers from defaulting on their debts, given their relative importance in the Italian economy.

Across households and companies, UniCredit, Italy's largest bank in terms of assets, stated that it has received more than 100,000 requests for moratoriums on outstanding loans worth €10 billion.⁴ Although the government is providing assistance to lenders, and banks can likely weather a short-term disruption, Moody's warned that "a prolonged outbreak would have a more severe impact on both loan quality and profitability."⁵

Going forward, companies are faced with continued uncertainty of social and economic conditions, and of the implications for consumer credit health. They are recognizing the need to prepare for shifting customer needs and an ongoing increase in the number of requests. To manage the increased operational burden, several Canadian banks have materially accelerated the design, approval, mobilization, and delivery of new solutions to address these concerns. For example, Royal Bank of Canada (RBC) has quickly shifted to respond to the current situation by retraining its staff to build customized relief plans for customers facing severe financial hardship.³⁰ As executives pivot from responding to this crisis to thinking about how they will recover and thrive, leading mortgage lenders will take the lessons learned from it to rethink transformation delivery, business-model innovation, and their overall strategic positioning.

Exhibit 1: Challenges faced by mortgage lenders due to COVID-19

Customer experience

Product shelf

Operations

Short-term challenges

(over the next 0-2 months)

Maintaining predictable and acceptable service levels across the value chain while processing elevated volumes of customer inquiries related to mortgage payment deferral programs.

Maintaining access to services despite disruptions (e.g., branch closures), which may require new or enhanced digital channels and increased capacity.

Medium-term challenges

(over the next 2-6 months)

Engaging in thoughtful cash-flow advice discussions with borrowers facing financial distress due to COVID-19.

Meeting customer expectations for turnaround times in the face of unprecedented volumes (e.g., longer digital and in-person wait times during a period of increased urgent requests).

Long-term challenges

(over the next 6-12 months)

Adapting to evolving customer expectations around providing a digital end-to-end mortgage origination process.

Balancing brand sentiment and social capital with operating profitability, specifically while addressing potentially significant volumes of collections and recovery activity.

Short-term challenges

(over the next 0-2 months)

Making difficult decisions on whether to continue lending and which products to prioritize, given market conditions and the lender's short-term liquidity needs (e.g., increasing risk on appraisal values resulting in increased scrutiny of certain types of residences).

Medium-term challenges

(over the next 2-6 months)

Facing the dilemma of whether to withdraw "riskier" mortgages (e.g., buy-to-let mortgages, high loan-to-value [LTV] mortgages), given that it may limit the addressable market and restrict access for some borrowers.

Long-term challenges

(over the next 6-12 months)

Determining which mortgage products to re-introduce (e.g., changing LTV restrictions) and which new innovative product constructs to explore (e.g., iBuyers, full-stack platforms, digital fractional ownership) in order to spur demand and adapt to changing customer needs.

Short-term challenges

(over the next 0-2 months)

Scaling current contact-centre operations to handle a significant increase in the volume of customer inquiries (e.g., repurposing talent and deploying new contact-centre training quickly).

Increasing efficiency and effectiveness of contact-centre operations (e.g., using robotic process automation (RPA) solutions to triage incoming customer inquiries, reserving human engagement for more complex customer inquiries).

Transitioning workforce to work from home; bolstering required technology infrastructure (e.g., VPNs, cloud LOS solutions).

Defining options and eligibility for mortgagepayment deferrals; administering programs on a large scale while accounting for evolving program scope and protecting against fraud.

Medium-term challenges

(over the next 2-6 months)

Creating improved digital capabilities that support service changes to brokers, sales representatives, and borrowers, while enhancing the user experience (e.g., more intuitive, faster).

Enabling processes necessary to facilitate closing mortgages digitally (e.g., autoappraisals, e-signatures, risk and compliance controls, regulatory approvals).

Long-term challenges

(over the next 6-12 months)

Adapting organizational culture to effectively motivate the mortgage advisor sales force, given the increasing number of employees working remotely.

Forecasting customer demand for new mortgage loans and refinances when allocating resources, which will be challenging given the unprecedented economic situation.

Earnings impact

Short-term challenges

(over the next 0-2 months)

Facing reduced income due to deferred payments, lower mortgage originations, and increased service costs.

Medium-term challenges

(over the next 2-6 months)

Facing significant pressure on feebased income due to reduced deal flow (e.g., brokers, commission sales forces, mortgage servicers, etc.).

Understanding the implications of mortgagepayment deferrals, including interest on deferred payments, and increased defaults and loan-loss provisions.

Long-term challenges

(over the next 6-12 months)

Predicting long-term impact on margins due to high volatility in interest-rate spreads.

Managing a prolonged decline in loan portfolio volume and the reduced revenue potential.

Balance-sheet impact

Short-term challenges

(over the next 0-2 months)

Ensuring short-term liquidity is available to continue to finance obligations in the face of lower cash inflows (e.g., payments).

Medium-term challenges

(over the next 2-6 months)

Financing the liquidity crunch caused by deferred mortgage payments, while still maintaining commitments to all funding sources.

Understanding the implications of mortgage-payment deferrals on provisions, impairment recognition, and capital adequacy measures.

Long-term challenges

(over the next 6-12 months)

Ensuring cost-effective liquidity to fund new mortgages; this challenge is particularly acute for regional banks, fintechs, and other smaller lenders (e.g., mortgage funds may be pressured to limit redemption rights for investors).

Risks

Short-term challenges

(over the next 0-2 months)

Managing exposure to borrower-default risks that have been exacerbated due to COVID-19.

Continuing to provide mortgages that are beneficial for the lender and borrower (e.g., credit-worthy borrowers) while managing credit-risk uncertainty.

Medium-term challenges

(over the next 2-6 months)

Incorporating new information (e.g., mortgage-deferral requests) to better understand customers' risk profiles (e.g., predicting a mortgage deferral).

Reducing risk when originating new mortgages by adjusting risk tolerance on the loan portfolio (e.g., effectively pricing interest rates), given the increased default risks.

Long-term challenges

(over the next 6-12 months)

Actively managing default risks as paymentdeferral programs expire (e.g., identifying which borrowers will default).

Managing concentration risks (e.g., assessing how diversified the borrower base is) as different industries and regions are disparately impacted by COVID-19; which will in part be determined by government policy to re-open the economy (e.g., which sectors to prioritize) and potential for follow-on waves of epidemic.

How have governments responded to support residential mortgage markets?

Both governments and lenders have moved at breakneck pace to respond to these unprecedented challenges. Governments have launched a plethora of policies to support both borrowers and lenders.

Over a timeline of just a few weeks, we observed governments intervene to achieve three major goals:

- (i) ensure access to credit continues for borrowers and lenders;
- (ii) maintain continued liquidity and smooth functioning of markets; and
- (iii) protect borrowers and lenders from catastrophic events.





Exhibit 2: Policy tools available to governments to support mortgage markets⁶



Monetary policy



Fiscal policy



Regulation



Support for lenders (institutional)



Increasing access to low-cost capital

Adjusting interest rates

(e.g., reducing interest rates, including providing forward guidance, engaging in bond purchases)

Example: United States

The Federal Reserve cut the federal funds rate to 0-0.25% and provided forward guidance.

Direct lending to FIs

(e.g., via overnight repos, lending directly to banks)

Example: United Arab Emirates

The UAE Central Bank announced zero interest-rate collateralized loans to banks (AED50 billion).

Market making and liquidity measures

(e.g., engaging in currency swaps for US\$ liquidity in foreign markets)

Example: **G20** Most G20 countries' central banks extended temporary swap lines with the other central banks.

Purchasing assets from lenders

(e.g., mortgage-backed securities or mortgage assets)

Example: United Kingdom

The Monetary Policy Committee announced purchases of £200 billion in government and corporate bonds.



Reducing capital requirements

Reducing capital requirements

(e.g., reducing reserve requirement ratios)

Example: Europe The European Central Bank allowed banks to operate below the Pillar 2 Guidance. Japan The Japan Finance Corporation allowed banks to operate below the minimum liquidity coverage ratio.



Easing regulatory burden

Easing mortgage guarantee criteria

(e.g., increasing accessibility to mortgage insurance, adjusting mortgage stress tests)

Example: Canada The criteria for government-guaranteed mortgage-loan insurance was temporarily relaxed.

United States The Federal Reserve has relaxed rules specific to non-performing loans in mortgage-backed securities (MBS).

Increasing government-sponsored securitization availability

(e.g., increasing securitization limits, reducing requirements to qualify)

Example: Canada The Canada Mortgage and Housing Corporation raised the mortgage volume that can be securitized.

Increasing non-performingloan requirements

(To reduce the need to recognize loans as non-performing)

Example: Argentina Banks were provided with an extra 60 days before they need to classify loans as non-performing.



Support for borrowers (business or individual)



Direct financial support

Providing stimulus to businesses

(e.g., cash-flow support, wage subsidies, temporary liability relief, investment incentive deductibles)

Example: Spain The government extended up to €100 billion in government loan guarantees for firms. United States The CARES Act provides more than US\$2 trillion in direct payments and low-interest loans to businesses and individuals.

Providing direct support to households

(e.g., payments, tax cuts, accelerated access to social safety nets such as unemployment benefits)

Example: South Korea
The government provided

consumption coupons for low-income households.



Payment deferrals / halting obligations

Deferring mortgage payments

(e.g., delaying principal or interest payments, or increasing the amortization period)

Example: Italy The Italian government decreed a mandatory moratorium on all outstanding mortgages for three months.

Suspending payments for government-sponsored loans

(e.g., deferring federal or provincial student loans)

Example: United States

The United States suspended federal student loan obligations for 60 days.



Limiting consequences of bankruptcy

Halting evictions and foreclosures

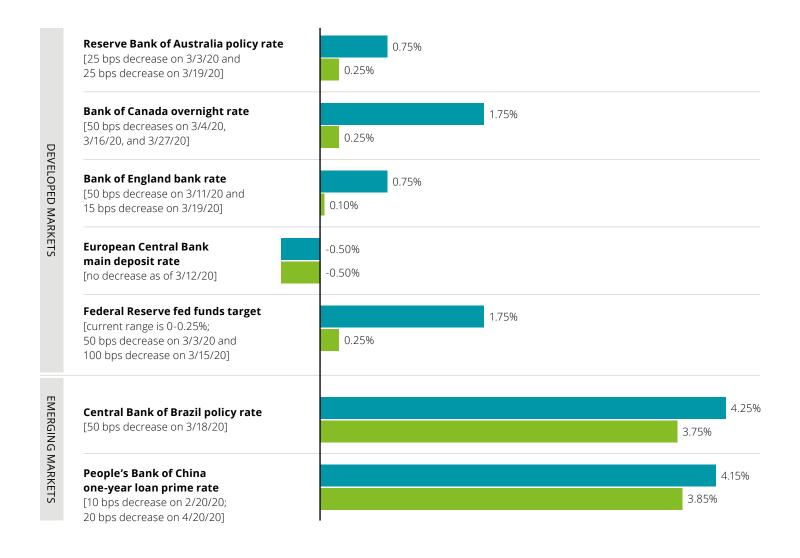
(e.g., local governments halting evictions and foreclosures)

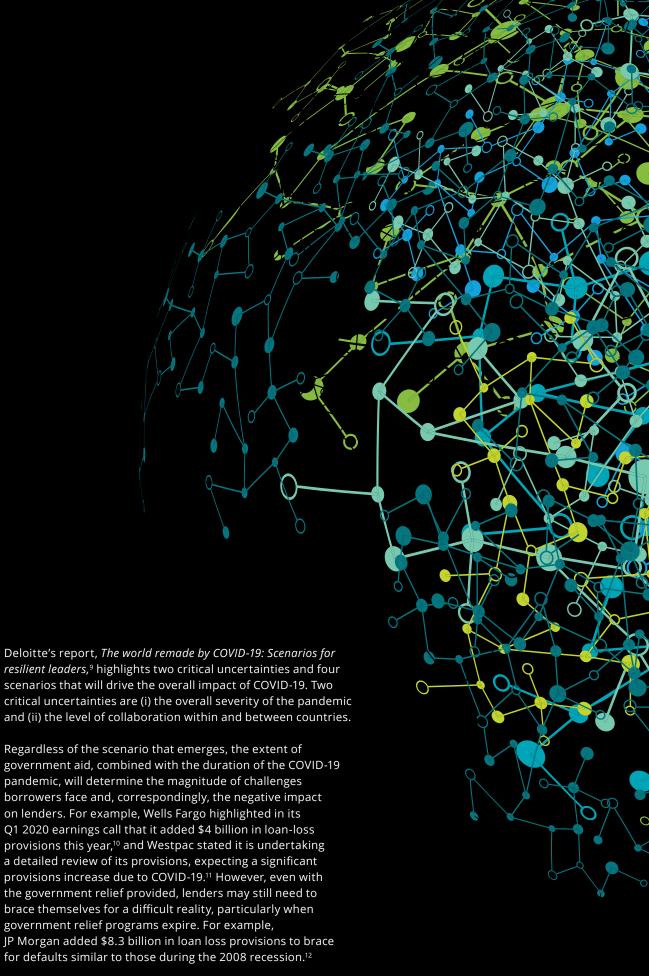
Example: United States The CARES Act enacted a 120-day eviction moratorium protecting nonpaying tenants of properties financed with federally backed mortgage loans.

As observed in Exhibit 3, we see that developed countries have been able to cut interest rates more aggressively than emerging markets have. This is due to increased leverage and increased inflation risk in some emerging economies. As some developing nations face high debt levels amid COVID-19, the International Monetary Fund and World Bank are providing support in the form of loans and grants. Some developing nations may also be wary of the inflationary pressures caused by prior application of monetary policy. This limits the ability of some emerging markets to use the full breadth of fiscal and monetary policy levers to support the mortgage market. These limitations may stifle the ability to respond effectively to challenges in mortgage markets.

Exhibit 3: Central Bank interest rate responses to COVID-198

"Pre-COVID-19" and "Post-COVID-19" periods may correspond to dates during the COVID-19 crisis (not necessarily before / after); these periods also relate to a country's timeline (and may not be broadly aligned across countries).





What have mortgage lenders done to respond to the crisis?

The actions taken by institutions fall under three general themes: responding to influxes of volume; managing and stabilizing business risk; and positioning for recovery. These include efforts to adapt and improve their customer experiences, product shelves, temporary relief programs, operating models, cash flow, and risk. The following are the top-priority actions that we have observed among lenders globally, in response to the challenges that have arisen for borrowers and lenders.

Exhibit 4: Immediate-term responses of mortgage lenders to COVID-19



Responding to influxes of volume

1

Offer mortgage payment deferral programs and other relief measures

2

Adjust workforce to a remotework model, and reallocate and retrain resources dynamically to handle changing needs

3

Strengthen capacity of digital self-service channels



Managing and stabilizing business risk

4

Evaluate portfolio risk and adjust underwriting policies

5

Adjust product shelf to reduce risk and target product offerings



Leverage advanced analytics to better calculate risk and predict hardship, including liquidity and ongoing swings in consumer credit health



Positioning for recovery

7

Re-imagine business process within technology-enabled business transformation



Place an increased focus on providing advice and guidance to customers



Support the broader community and COVID-19 relief efforts

Responding to influxes of volume



Offer mortgage-payment deferral programs and other relief measures

Governments and lenders around the world have introduced three-to 18-month mortgage-payment deferral programs. Many institutions require that a borrower demonstrate true financial hardship in order to qualify for deferred payments, while others are offering the option to a broader set of customers. The programs have taken a variety of forms, from allowing borrowers to make interest-only payments, to deferral of all payments, and others. These relief efforts help to alleviate some of the immediate financial obligations of homeowners and prevent payment defaults in the short-term due to unexpected financial circumstances. However, some lenders are facing liquidity challenges as they continue to have financial obligations to investors and their sources of funding, despite the interruption of cash flow from borrowers. Moreover, there is general uncertainty about whether the poor economic and employment conditions caused by the pandemic will persist beyond the deferral period, and how credit health and default rates will shift in the long-term.

Early signs in Canada show that approximately 600,000 people have applied to the forbearance program, representing more than 10 percent of mortgages provided by the five largest banks.¹³ In the United States, the Mortgage Bankers Association notes that approximately three million homeowners have entered forbearance, representing around six percent of mortgage servicers' total portfolio volume.¹⁴

Exhibit 5: Examples of geographies offering mortgage deferral programs

Canada •

Key details

- Voluntarily offered by financial institutions (Fls) since mid-March 2020.
- Up to a six-month period for mortgage-payment deferrals.¹⁹
- Uptake: More than 600,000 mortgage deferrals as of early April 2020, which is 10 percent of the amount of outstanding mortgages provided by the "Big Five" banks.¹³

Payments deferred, and interest capitalization¹⁵

Interest and principal payments can both be deferred, with interest continuing to accrue and be recapitalized. Depending on the institution and borrower, the loan can be re-amortized; when it is not, the "Big Six" banks are increasing payments at the start of the next term, whereas smaller lenders are increasing payments immediately after the deferral period.

Liquidity risks facing financial institutions

Liquidity risk lies with issuers of mortgages. The greatest liquidity risk lies with smaller lenders (e.g., mortgage finance companies) that do not have access to cheaper sources of funding (e.g., large deposit balances) to continue originating mortgages, but that are still on the hook for scheduled payments to investors and creditors.

United States •

Key details

- Mandated by the government through the CARES Act for federally backed mortgages, which represents more than 50 percent of outstanding mortgages; passed on March 30, 2020, but voluntarily offered by FIs since mid-March 2020.²⁶
- Up to a 12-month period for mortgage-payment deferrals.²⁷
- Uptake: approximately three million mortgage loans in forbearance as of April 12, 2020.¹⁴

Payments deferred, and interest capitalization¹⁵

Interest and principal payments can both be deferred, with interest continuing to accrue and be recapitalized. Depending on the institution and borrower, the loan is re-amortized, the maturity of the loan is extended to cover missed payments, or monthly payments increase after the deferral period.

Liquidity risks facing financial institutions

Liquidity risk lies with issuers of mortgages. Greatest liquidity risk lies with non-bank mortgage servicers that service loans guaranteed by Fannie Mae and Freddie Mac, government-sponsored entities. Non-banks use the servicing revenue as collateral to borrow money from banks to use as working capital. Right now, mortgage forbearances are limiting their ability to access this working capital while still needing to advance scheduled payments to mortgage-backed securities (MBS) investors. The Federal Housing Finance Agency has released guidance that limits the payment obligation on servicers to four months for mortgages under forbearance.²⁸



Key details

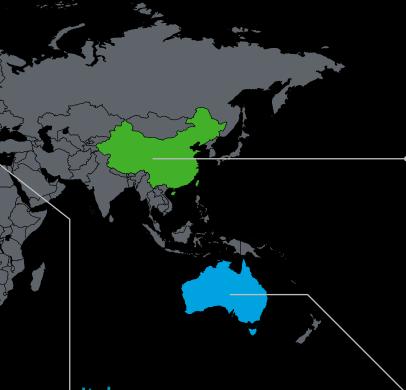
- Voluntarily offered by FIs since mid-March 2020.
- Up to a three-month period for mortgage payment deferrals.²³
- **Uptake:** More than 1.2 million mortgage deferrals as of April 14, 2020, which is equivalent to one in nine mortgages in the UK.²⁴

Payments deferred, and interest capitalization¹⁵

Interest and principal payments can both be deferred, with interest continuing to accrue and be recapitalized. Depending on the institution and borrower, the loan is re-amortized, or monthly payments increase after the deferral period.

Liquidity risks facing financial institutions

Liquidity risk lies with issuers of mortgages, but investors may also be impacted. Fitch has warned that some tranches on investment-grade residential mortgage-backed securities (RMBS) notes may be downgraded. With a large and growing RMBS market, the United Kingdom does not rely on public securitization as much as other markets, and provides fewer guarantees to investors.²⁵



China

A broader loan-forbearance program was requested by the government and is being implemented by financial institutions. It is targeted at both households and businesses and includes: deferring payments; making rules for recognizing non-performing loans that are more favourable for lenders; and relaxing decentralized housing policies. Additionally, the Banking and Insurance Regulatory Commission requested that banks be more flexible around mortgage and creditcard loans, including repayment conditions.²⁰

Italy

Key details

- Mandated by the government since March 17, 2020.
- Government has mandated up to three months for mortgage-payment deferrals, but some FIs are offering up to 18 months.²¹
- **Uptake:** The option to suspend payments for three months was offered for all mortgages as per the government mandate.

Payments deferred, and interest capitalization¹⁵

Interest and principal payments can both be deferred, with interest continuing to accrue and be recapitalized. Depending on the institution and borrower, the loan is re-amortized, or monthly payments increase after the deferral period.

Liquidity risks facing financial institutions

Liquidity risk lies with issuers of mortgages. It is estimated that the liquidity shortfall will be relatively contained, as only 13 percent of Italian households hold properties with mortgages on them. The risk appears relatively small compared with other geographies.²²

Australia

Key details

- Voluntarily offered by FIs since mid-March 2020.
- Up to a six-month period for mortgage-payment deferrals.¹⁶
- Uptake: More than 375,000 mortgage deferrals as of April 3, 2020, which is six percent of the amount of outstanding mortgages.¹⁷

Payments deferred, and interest capitalization¹⁵

Interest and principal payments can both be deferred, with interest continuing to accrue and be recapitalized. Depending on the institution and borrower, the loan is re-amortized, or monthly payments increase after the deferral period.

Liquidity risks facing financial institutions

Liquidity risk lies with issuers of mortgages. Non-bank mortgage lenders are particularly vulnerable in Australia as they are a large and fast-growing segment in the market. However, as part of Australia's initial economic response to the COVID-19 crisis, the government has established a fund dedicated to supporting non-bank lenders.¹⁸

Adjust workforce to a remotework model, and reallocate and retrain resources dynamically to handle changing needs

As companies have adjusted to the closing of their physical branches and offices, many employees have either transitioned to conducting their work remotely or are facing an inability to work due to the nature of their work. Lenders have grappled with the operating-model changes required to enable employees to work from home, including enabling VPN access, provisioning of laptops and other hardware across the workforce, and other changes. Lenders have also re-evaluated their business needs and have reallocated employees in response.

With an increased amount of customer inquiries and heightened overall concern, institutions have experienced high contact-centre volumes, and thus have acted to boost efficiency by implementing RPA, as well as cross-training and equipping employees appropriately to support growing customer requests—both reactive and proactive outreach. Beyond responding to short-term operating needs, investments in remote work will allow institutions to be prepared for broader shifts in customer and employee behaviour over the medium-and long-term (e.g., potential permanent shift in contact-centre volumes).





Examples

In early March, MCAP, a major Canadian brokerchannel originator, transitioned more than 800 employees across the country to work from home. Employees from underwriting, sales, and other business lines have leaned in to support the contact centre in working through the backlog of client requests as quickly and effectively as possible.²⁹

RBC retrained approximately 200 staff who normally adjudicate new loan applications, in order to redeploy them to help build custom relief plans for personal-banking customers who are experiencing severe financial stress with hardships that are expected to last longer than six months.³⁰

Major American banks took similar steps in response to swings in demand that occurred at the start of the COVID-19 outbreak. The Bank of America shifted around its existing workforce to handle an increase in purchase applications and demand for homeequity loans, while Wells Fargo shifted workers from its servicing operations to mortgage processing. To handle increasing demands, it also continued to hire loan officers, underwriters, processors, and closers.³¹

A major Australian mortgage lender, whose offshore contact centres were significantly impacted, has been able to leverage real-time operational insights (from both the human and digital workforce) on shifting customer interactions and demands. This more effectively and efficiently supports the transition and cross-training of non-operations staff into operational roles. As a result, employees are better utilized, while, based on these insights, executive leadership can make decisions serving immediate needs and form longer-term strategic objectives.³²

3 Strengthen capacity of digital self-service channels

With the sudden implementation of physical-distancing policies and closing of services in many geographies, institutions have had to rapidly adjust to serving customers almost entirely digitally. This has happened at the same time that institutions have been receiving heavy customer inquiries and refinancing requests. Leading players have been taking the initiative to invest in expanding the functionality and efficiency of their digital platforms. This has enabled them to address short-term strains on operating models that would have otherwise required heroic efforts on behalf of staff. Moreover, these digital investments will be valuable in the longer-term as previous barriers to digital adoption such as customer preferences and regulatory approvals are upended permanently post-COVID-19.





Examples

In handling increased short-term demand, AmeriHome Mortgage Company and Allied Mortgage Group have leveraged their ongoing implementation of Al Foundry's Agile Mortgages solution to accelerate and improve the efficiency of mortgage processing. The solution uses Al and RPA to auto-classify documents, auto-extract data, execute preloaded business rules, and update the loan-origination system. This accelerates throughput of customer requests, reduces costs, and reduces human error. These examples demonstrate the advantage that lenders who have proactively invested in their digital capabilities have when it comes to handling the current surge in customer requests.³³

Better.com, a digital-based lender in the United States, reported a 200 percent increase in applications since March 1, 2020, and announced plans to hire 150 people per month in sales and mortgage operations, to reach a total of 1,000 new employees this year. The company's digital platform allows applicants to lock-in rates instantly, without having to face long wait times by phone as with traditional bank lenders. Better.com states that 82 percent of its potential borrowers don't speak with a loans officer while completing their application.³⁴

Trustee Savings Bank (TSB) in the United Kingdom launched "Smart Agent," designed to help customers apply for a repayment holiday on mortgages, personal loans, and business loans. Since launching on March 25, 2020, Smart Agent has answered more than 11,000 customer requests using a combination of a chatbot and employees. Before this feature was introduced, many of these requests would have required a branch visit or a call to the bank's contact centres. This approach enables TSB's contact centres and branches to dedicate more resources to serving the bank's most vulnerable customers.³⁵

Knowledge Bank, a data-aggregation company based in the United Kingdom that provides a single point of reference for every lender's criteria, policy, and processes, has seen a significant spike in adoption from mortgage brokers. The company recently reported that its service has been taken up by 1,325 brokers, likely due to the vast number of changes lenders have made to mortgage criteria due to COVID-19. In early April 2020, the platform observed an average of almost 300 additions and changes to mortgage criteria per day.¹⁷

Managing and stabilizing business risk



Evaluate portfolio risk and adjust underwriting policies

Many lenders are finding it difficult to project credit conditions and portfolio health in the near future. Companies are seeking to prepare themselves for uncertainty by taking measures to adjust the terms of their underwriting policies and deals in order to manage risk appropriately going forward. In the immediate term, lenders have been implementing process changes to their appraisal mix and electronic closing procedures, as well as appropriate policy adjustments to loan-to-value (LTV) benchmarks and appraisal values. The U.S. market is fairly uniformly tightening the credit box for borrowers, as measured by borrowers' credit scores.⁵² In the medium-to long-term, lenders will need to be open to new ways of underwriting and adjudicating risk, using broader and non-traditional types of data, and exploring new modelling techniques.

Examples

In response to the negative economic and employment implications of COVID-19, Chinese banks have been increasing scrutiny and tightening credit assessments for mortgages, particularly for borrowers in sectors that are at higher economic risk. Lenders have been flagging applicants who are expected to take significant unpaid leave, as well as discounting nonrecurring income and commission-based income. Instead of taking the average of applicants' commissions over the previous six months, banks have been asking applicants to prove that they have received adequate commissions in the past 12 months, in order to pass the debtto-income ratio and stress test. These short-term adjustments to underwriting standards aim to mitigate risk of credit default in the medium-to-longer term as economic conditions remain uncertain.36

Toronto Dominion Bank (TD) has taken measures to mitigate portfolio risk and ensure it is prepared for economic uncertainty over the longer term.

This includes leveraging tools such as predictive artificial intelligence provided by the AI startup Layer 6 that it acquired in 2018. Layer 6's technology can be used to help predict which customers are going to go through financial hardship.³⁷

Adjust product shelf to reduce risk and target product offerings

In the short term, lenders have become wary of the increased risk of continuing to offer the same product portfolio in a changing economic climate. Many have taken steps to mitigate risk by temporarily modifying or limiting their product shelf by adjusting several factors, such as interest rates, LTV, and other loan terms. Some lenders, particularly smaller ones, have taken a conservative approach by halting new originations altogether. Institutions are continuously assessing business and consumer circumstances to make informed decisions about their product shelves in the long term as the industry begins to recover.

Examples

A number of mortgage lenders in the United Kingdom have modified their product shelf to mitigate risk. For example, Halifax, a leading mortgage lender in the United Kingdom under Lloyds Banking Group, withdrew most of the mortgages it sells through brokers, including all first-time buyer loans, and has also stopped all lending above 60 percent LTV. Nationwide, another major UK mortgage lender announced it was no longer offering tracker (variable rate) residential mortgages to new customers and maintaining price floors for existing tracker mortgages to set a lower limit on the mortgage rate. Shortly after, the lender reintroduced two-year tracker mortgages in response to a further Bank of England rate cut from 0.25 percent to 0.10 percent.³⁸

In the United States, several smaller lenders that rely on non-governmentbacked mortgage bonds have run into significant financial challenges. For example, Angel Oak Mortgage Solutions, which specializes in loans that are not federally backed, cut 70 percent of its workforce. Additionally, Deephaven Mortgage and Citadel Servicing Corp., which have similar business models, announced that they would be suspending all loan applications, closings, and funding. Part of the concern for private mortgage lenders is that their sources of wholesale funding (e.g., other banks), which give them short-term loans to fund mortgages, either cut their credit lines or made them significantly more expensive. Investors have also recognized these risks; between February and March 2020, the volume of loans sold on Maxex, an exchange that lets lenders sell mortgages to institutional investors, dropped by 45 percent.39

Leverage advanced analytics to better calculate risk and predict hardship, including liquidity and ongoing swings in consumer credit health

As the crisis evolves, the health of the lenders' existing books is likely to fluctuate dramatically. A prolonged economic crisis could put even the most financially fit borrowers into financial distress, requiring a more precise and nuanced measurement of portfolio risk. It is imperative for companies to gather as much data as possible and leverage that data to develop better and more accurate risk and liquidity models. This involves analyzing all customer interactions to understand how the risk of their customer base is evolving, and anticipating that there will be an ongoing flux of risk and customer volumes over the next six to 12 months. Major banks are particularly focused on customers with whom they have multi-product relationships, and customers who have applied for loan-payment deferrals.

Leveraging data to predict distress early and estimate losses from deferred loans will be critical to ensuring business continuity beyond the deferral period.

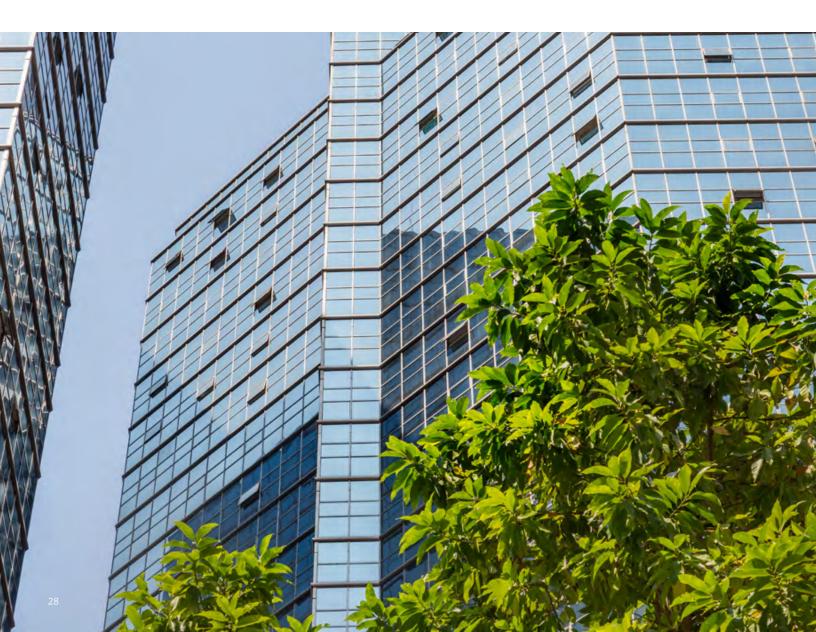
Moreover, institutions are proactively intervening with customers by appropriately increasing engagement to maintain their trust and credit health. Lastly, enhanced analytics tools can help assess dynamically changing credit conditions and future request volumes, allowing institutions to adapt their service models appropriately to handle shifting business needs while continuing to provide contextual cash-flow advice.



Example

Intesa Sanpaolo, a major Italian bank, has experienced many thousands of new credit-service requests a day from customers. Having implemented an early-warning indication system earlier, the bank has been able to highlight specific cases for which early-warning indicators are triggered in order to more actively manage and rapidly analyze the portfolio.⁴⁰

Positioning for recovery



Re-imagine business process within technology-enabled business transformation

Many of the steps in the mortgage lifecycle have been disrupted due to physical-distancing rules. Lenders are shifting business processes that have traditionally been in-person to digital and remote work in the short term, in order to maintain the regular flow of business as much as possible. While lenders have put in place temporary solutions and relaxed some policies to facilitate this, the industry could see a shift in future operations even as physical-distancing policies relax. Demonstrating that these digital processes work well in the short term could result in longer-term adoption by customers and employees, as well as demonstrate credibility to regulators and risk partners. In an increasingly digital economy, some companies are recognizing this and adopting a longer-term mindset on how they conduct regular business processes going forward.

Examples

In the United States, Fannie Mae and Freddie Mac, in light of current circumstances, relaxed their standards for both property appraisals and verification of employment on the loans they purchase. The Federal Housing Association and Veterans' Association are both allowing for appraisal and income-verification alternatives, as appraising homes and verifying employment are becoming more difficult. These include exterior-only appraisals (known as drive-by appraisals) or in some cases desktop appraisals, which rely on public records, multiple-listing service information, and other third-party data sources to identify the property characteristics. Although these measures are being taken in the short term to address the contagious nature of COVID-19, this may signify a potential change in business models in the long term.41

The ERA Realty Network in Singapore, a division of Realogy, has launched virtual marketing and administrative tools to help property agents conduct regular business digitally. Property agents are provided with a portfolio of video and virtual tours for 68 executive-condo and private-residential projects. They have also been equipped with an app that provides the latest information on which units in a project have been sold, and which are still available (and at what prices), along with details such as floor plans. Agents can share the information with buyers through email and WhatsApp. At the same time, Singapore's Controller of Housing (COH) has lifted the requirement for property developers to provide detailed property information (termed "particulars, documents, and information," or PDI) prior to the issuance of an Option to Purchase (OTP). While OTPs and Standard Sale and Purchase Agreements (SP&A) still require a lawyer's physical signature, the ERA is recommending that agents turn to courier solutions to obtain the signatures. 42

Place an increased focus on advice and guidance to customers

In times of crisis, customers are not only facing direct financial difficulties, they are also experiencing a high level of uncertainty and concern. Many consumers are looking for further knowledge and expertise to develop a comprehensive understanding of the situation and look to their financial institutions for guidance. Beyond tangible relief measures, many companies have recognized this and are taking steps to address these concerns. Lenders are leveraging the information they possess to educate their customers on current economic circumstances and implications for their financial situations, with the hope of leading customers and businesses to better financial outcomes.



Example

Koodoo, a United Kingdom-based mortgage technology provider for lenders and aggregators, introduced a new website and technology toolkit that offers guidance on mortgage payment holidays amid the COVID-19 crisis to help UK consumers better understand their mortgage agreements. The solution was built in collaboration with major lenders, regulators, and trade bodies, and includes content and FAQs related to mortgage payment holidays, details on various lenders' terms, and personalized projections of what borrowers' payments would look like during and after the deferral period. Consumers are also able to apply for payment holidays with their lender through the website. 43

Support the broader community and COVID-19 relief efforts

Beyond initiatives to help provide relief to customers and create optimal outcomes for their business, many institutions are recognizing how urgent and critical the COVID-19 situation is. Companies that have the power to contribute to the relief efforts are making donations and taking other actions. Given that the nature of this economic crisis is rooted in a global pandemic, institutions have taken the initiative to do their part in accelerating recovery of both society and the economy globally.

Examples

Upon hearing that Canadian health-care facilities were having to ration protective equipment, the Bank of China donated medical supplies (including 30,000 medical masks, 10,000 sets of protective clothing, 10,000 goggles, and 50,000 pairs of gloves, followed by N95 medical masks) to Canada. To support efforts in Ireland as well, the Bank of China also donated 200,000 items of protective equipment for healthcare workers battling COVID-19 there.⁴⁴

Spanish financial institution BBVA committed to donating €35 million to combat the COVID-19 outbreak across its footprint. In March 2020, BBVA delivered to Spanish health officials the initial batch of medical equipment, respirators, and surgical masks worth approximately €3 million. Since then, BBVA has been gradually implementing the campaign in other countries and enlisting the help of its employees. Colombia's BBVA employees, numbering more than 7,000, have participated in a program in which they donate a day of their salary—an amount that BBVA matches—to support the public healthcare system. At the same time, the bank's mobile app offers customers the ability to make donations that will be allocated to people in vulnerable situations. ⁴⁵

Standard Chartered committed US\$1 billion of financing for companies that provide goods and services to help the fight against COVID-19, and for those planning to switch into making products that are in high demand to fight the pandemic. The bank is providing preferential financing rates to those companies in the form of loans, import/export finance, or the working capital facilities that they use for day-to-day business operations to help them tool up, and to help existing manufacturers get their products to market. 46



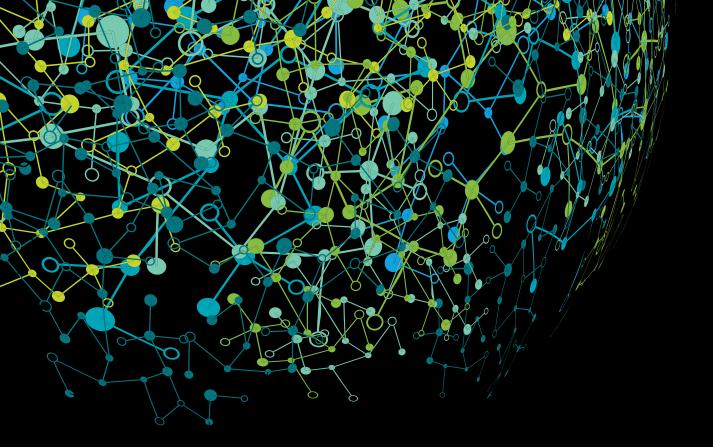
Conclusion

COVID-19 is having a significantly adverse effect on lenders globally, and there is a need for effective, multi-stakeholder responses in each region to help maintain the continued health of the global residential mortgage market. Governments and lenders alike have undertaken an initial response: governments are leveraging their broad monetary, fiscal, and regulatory tools, and lenders are executing policies across internal operations, customer processes, and risk management to handle the challenges of this crisis.

This response is only the beginning of the impact that COVID-19 will have on mortgage markets. Executive attention, and indeed future iterations of this research, will need to turn to recovery and what the next six to 12 months will look like. Significant uncertainty remains over how the world will evolve, including uncertainty over:

- The epidemiological curve of the pandemic (e.g., duration, ongoing severity, potential for follow-on infection waves, etc.).
- The macroeconomic conditions of recovery, including future credit conditions, portfolio risk, and consumer demand.
- The evolution of governments' and central banks' responses, particularly as the initial public-sector COVID-19 response programs expire.

What's becoming clear is that returning to the "old way" of working is not an option. Winning mortgage lenders will look to take advantage of growth opportunities even in this uncertain market. Lenders will need to place smart bets and reassess their competitive position, their operating models, and their ecosystem relationships.



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Appendix

Exhibit 6: Country research summary

The following table provides a summary of COVID-19 conditions and responses across several global geographies: Australia, Canada, China, Europe, Latin America and the Caribbean, the United Kingdom, and the United States. Key information is provided on the severity of the outbreak and the resulting economic impact, as well as the government and business response (specific to mortgage lending) in each country. This serves as an overview of the research conducted on each geography in order to provide a basis of comparison across key metrics and strategies; more in-depth detail and analysis on stakeholder actions are explored further in other sections of the report.

Regional summary⁴⁷

Australia

As of April 30:

Total cases: 6,753 Total deaths: 91 Total recovered: 5,715

Economic impact^{48,49}

- Containment measures such as limiting non-essential gatherings, preventing places of social gathering from opening, shutting down some non-essential businesses, and banning overseas travel.
- · Interrupted supply chains.
- GDP = US\$1.4 trillion in 2019.

Government response^{29,48}

- Fiscal spending totaling A\$199 billion (9.9% of GDP) to support the health system, individuals, households, businesses, and the education system, and A\$11.5 billion state and territory spending.
- Lowered cash rate target to 0.25%.
- Supporting lending to businesses (including A\$90 billion in funding to authorized deposittaking institutions [ADIs]).
- · Expanding repo operations.
- Purchasing government and semi-government bonds.
- Establishing a foreign exchange swap line for US dollars.

Business response (i.e., mortgage lending)

- Closing/limiting branch operations and expanding online operations.
- Offering up to six months of mortgage and other loanpayment holidays.²⁵
- Suspending interest payments.
- · Waiving retail banking fees.
- Offering loan restructure and consolidation support.

Canada

As of April 30:

Total cases: 53,236 Total deaths: 3,184 Total recovered: 21,423

Economic impact48,49

- · Sharp decline in global oil prices.
- Federal and provincial containment measures such as travel restrictions, physicaldistancing, and declarations of states of emergency and closures of non-essential businesses in some provinces.
- · Interrupted supply chains.
- GDP = US\$1.7 trillion in 2019.

Government response^{29,48}

- Fiscal spending totalling \$193 billion (8.4% of GDP) to support the health system, households, and firms.
- Lowered overnight rate to 0.25%.
- Expanded buy-back program of government and mortgage bonds.
- Expanded eligible collateral for term repo operations.
- Providing liquidity support to financial institutions.
- Enhancing provision of liquidity through US-dollar currency swaps.

Business response (i.e., mortgage lending)

- Closing/limiting branch operations and expanding online operations.
- Offering up to six months of mortgage and other loanpayment deferrals.¹⁷
- Reducing mortgage rate discounts to conserve profitability.
- Relaxing standards for property appraisals and employment verification.

China

As of April 30:

Total cases: 82,862 Total deaths: 4,633 Total recovered: 77.610

Economic impact^{48,49}

- Containment measures such as lockdowns, mobility restrictions at the national level, physical-distancing, and a 14-day quarantine period for returning migrant workers.
- Housing market decline in both sales and prices, with forecasted price growth of 0-2%.
- · Interrupted supply chains.
- GDP = US\$14.1 trillion in 2019.

Government response^{29,48}

- Fiscal spending of RMB2.6 trillion to support the health system (including epidemic prevention and control), individuals, and communities.
- Providing RMB3 trillion to China's banking system.
- Providing liquidity support to businesses.
- Providing delay of loan payments and relaxing policies related to local housing.

Business response (i.e., mortgage lending)

- Closing/limiting branch operations and expanding online operations.
- · Providing low-cost loans.
- Donating food and supplies to relief efforts.
- Developing plans for short-term liquidity.

Europe (excluding UK)

As of April 30:

Total Cases: 1,202,191 **Total Deaths:** 108,464

Economic impact^{48,49}

- Containment measures taken by most European countries, ranging from lockdowns and travel restrictions to school closures and bans on large gatherings, as well as mandated teleworking policies.
- · Interrupted supply chains.
- GDP = US\$18.8 trillion in 2018.50

Government response^{29,48}

- European Union spending totalling €577 billion (4.3% of EU GDP) to support health systems, companies, and workers.
- Conducting asset purchases of €840 billion until end of 2020.
- Modified European Central Bank supervision requirements.

Business response (i.e., mortgage lending)

- Closing/limiting branch operations and expanding online operations.
- Offering mortgage and other loan-payment holidays.
- · Donating capital and supplies.
- · Providing thought leadership.

Regional summary⁴⁷

Latin America and the Caribbean

As of April 30:

Total Cases: 213,625 Total Deaths: 11,180

Economic impact48,49

- Containment measures in most countries, such as travel restrictions, physicaldistancing, declarations of state of emergency in some municipalities and states, and closure of schools and public recreational facilities.
- · Interrupted supply chains.
- GDP = US\$5.8 trillion in 2018.⁵¹

Government response^{29,48}

- Fiscal spending and reallocation of public spending to support individuals, communities, and firms.
- Reduced interest rates (e.g., Mexico 6.5%; Brazil 3.75%).
- Providing secured loans to banks (e.g., Brazil has a US\$60 billion credit facility).
- Providing liquidity in money markets via repos (e.g., US\$10 billion in Brazil).
- Setting up swap lines with the US Federal Reserve (e.g., Mexico = US\$60 billion).

Business response (i.e., mortgage lending)

- Limiting branch operations with increased health and safety measures, and expanding online operations.
- Offering mortgage and other loan-payment deferrals.

United Kingdom

As of April 30:

Total Cases: 171,253 Total Deaths: 26,771

Economic impact48,49

- Containment measures such as: travel restrictions; socialdistancing measures; closures of entertainment, hospitality, non-essential shops, and indoor premises; and increased testing.
- Compared with Europe, particularly large mortgage market that has been significantly affected.
- Interrupted supply chains.
- GDP = US\$2.7 trillion in 2019.

Government response^{29,48}

- Fiscal spending of more than £49 billion to support public services and charities, businesses, vulnerable individuals and workers.
- · Lowered bank rate to 0.1%.
- Expanded holding of government and non-financial corporate bonds by £200 billion.
- Providing £330 billion of credit and liquidity support to businesses.
- Donating to international response funds.

Business response (i.e., mortgage lending)

- Closing/limiting branch operations and expanding online operations.
- Offering up to three months of mortgage and other loanpayment holidays,²² extending loan terms, and increasing credit to customers.
- Adjusting or limiting product shelf to reduce risk.
- Offering guidance and online mortgage-management tools.

United States

As of April 30:

Total Cases: 1,094,465 Total Deaths: 63,855 Total Recovered: 151,818

Economic impact^{48,49}

- Federal and state measures including: travel restrictions; physical-distancing; declaration of states of emergency; closure of schools, bars and restaurants; and increased testing.
- · Interrupted supply chains.
- GDP = US\$21.4 trillion in 2019.

Government response^{29,48}

- Fiscal spending totalling US\$2.5 trillion (12% of GDP) to support the health system, states, households, firms, and individuals.
- Lowered federal funds rate to 0-0.25%.
- Commitment to purchase at least US\$700 billion in MBS and treasury securities.
- · Expanded repo operations.
- Cut rates on international currency swaps.
- Providing liquidity support for financial institutions and other corporations.

Business response (i.e., mortgage lending)

- Closing/limiting branch operations and expanding online operations.
- Offering up to 12 months of mortgage and other loanpayment deferrals.²⁰
- Providing additional support for consumers and small businesses.
- Relaxing standards for property appraisals and employment verification.

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