IS THE CORONAVIRUS ROCKING THE FOUNDATIONS OF CAPITAL MARKETS?

How the economic crisis induced by the coronavirus is impacting capital markets, investment management and the authorities' response

June 2020

IS THE CORONAVIRUS ROCKING THE FOUNDATIONS OF CAPITAL MARKETS?

How the economic crisis induced by the coronavirus is impacting capital markets, investment management and the authorities' response

Results of a membership survey conducted by CFA Institute

June 2020

DISCLAIMER: In the mainland of China, CFA Institute accepts CFA® charterholders only.

The mission of CFA Institute is to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society.

CFA Institute, with more than 170,000 members worldwide, is the not-for-profit organization that awards the Chartered Financial Analyst® (CFA) and Certificate in Investment Performance Measurement® (CIPM) designations. CFA®, Chartered Financial Analyst®, AIMR-PPS®, and GIPS® are just a few of the trademarks owned by CFA Institute. To view a list of CFA Institute trademarks and the Guide for the Use of CFA Institute Marks, please visit our website at www.cfainstitute.org.

© 2020 CFA Institute. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the copyright holder. This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional service. If legal advice or other expert assistance is required, the services of a competent professional should be sought.

Contents

1. Executive Summary 1
2. Introduction 3
    - 2.1 Background to the Study and Why CFA Institute Surveyed its Members 3
    - 2.2 Survey Details and Methodology 7
    - 2.3 Highlights 7
3. Details of Results 11
    - 3.1 A Conservative Economic Recovery—Which Alphabet Letter will it Be? 11
    - 3.2 Finance Professionals Circumspect in the Face of Volatility and Liquidity—Could Mispricing be an Issue? 15
    - 3.3 Public Authorities have Rolled out Heavy Support Artillery—Was this Warranted, Should it Stop, or Will We Need Life Support for Eternity? 27
    - 3.4 A Regulatory Conundrum—To Relax or not to Relax, to Ban or not to Ban? 31
    - 3.5 Ethics in Times of Crisis—Are Morals Stronger than Greed? 38
    - 3.6 Free Markets and the Economy—Do we even need Markets, and will there Still be Private Companies Left? 42
    - 3.7 Active Investing—The Return? 46
    - 3.8 Finance Jobs—Should we be Worried, or is Employment more Resilient than Feared? 49
4. Appendix 1. Survey Demographics 54

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

This page intentionally left blank

1. Executive Summary

CFA Institute has conducted a survey of its global membership to analyse the effects of the current economic crisis caused by the coronavirus epidemic on financial markets and the investment management industry. The survey was run worldwide from 14 to 24 April 2020.

The uniqueness of the current situation has its roots in the nature of the economic crisis. It was de facto self-inflicted at a time when the economy was in relatively stable conditions and markets were not displaying specific or urgent signs of stress and imbalance. Public authorities, regulators, central banks, and market operators have therefore struggled to tap into old playbooks to find the appropriate response. Essentially, the actions of public authorities have focused on a clear endeavour to ensure that the widespread economic stoppage does not morph into a full-blown crisis of trust and a dislocation of financial markets. These actions could be likened to a massive bridge or airlift between the before and after crisis, not too dissimilar, conceptually, to the 1948–49 Berlin airlift aimed at sustaining the population of West Berlin while awaiting a structural resolution to the political crisis.

Naturally, in such circumstances it is difficult to find meaningful commentaries on the possible outcomes, as the situation changes almost daily. CFA Institute is trying to bring clarification and stabilisation to the wide array of public commentary currently raging. The risks are not insignificant, as the very nature of financial markets and the role of the financial industry as an allocator and distributor of capital to the economy could change. Through its global expert membership, CFA Institute is in a unique position to separate the wheat from the chaff by dissecting the true trends at play right now. Perhaps the truth, as often, lies somewhere in the middle.

These are the themes that have been explored in the study:

- **The shape of a potential economic recovery**

  CFA charterholders appear more conservative than the current often optimistic tone seen in banking and industrial corners, by largely favouring a medium-term (hockey stick–shaped) or slow-paced economic recovery (U-shaped).

- **The market impact on volatility, liquidity and price formation**

  Responses indicate investment firms are not panicking in the face of heightened volatility and lower liquidity, as they are still observing in large part if and how strategic asset allocation should be altered. However, there is a real risk that the current stress could result in specific asset mispricing imbalances.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

- **The interventionism of public authorities**

  The decision to intervene by supporting the economy and markets appears to be vindicated by respondents. Yet, they are divided on whether this aid should be continued to support the recovery or stopped as soon as possible to allow fiscal rigour and free markets to take over.

- **The regulatory response**

  A similar dichotomy is observed in the response provided by market conduct and security regulators. In general, finance professionals seem to agree conduct rules should not be relaxed in times of crisis, yet they also think regulators have a role to play in holding the market's hands through consulting with industry on appropriate measures. A certain degree of corporate responsibility is also supported as respondents believe companies that have received public support should not pay dividends or pay executive bonuses. However, professionals reject a ban on short selling.

- **Ethics in times of crisis**

  There is a risk that the current stressed conditions will generate unethical behaviour in the investment management industry, according to professionals. This should be monitored.

- **The role of finance and its business model**

  There appears to be a recognition that markets are an important part of how the economy operates and that it is important to show these markets continue to function appropriately. The crisis will also have a structural impact on the industry as large-scale bankruptcies are expected, but also an accelerated effort to use operational automation to reduce fixed costs.

- **The active versus passive debate**

  The jury is still out to determine if a crisis situation could signal a return in good graces of active strategies. A significant proportion of respondents believe this is unlikely, which could indicate deeper foundational shifts in the industry and public perception that the crisis is not altering.

- **The impact on employment in the financial space**

  It looks too early to tell if the current crisis will have a significant impact on finance jobs. Most firms appear to be in waiting mode or have resorted to hiring freezes while waiting for a clearer landscape. Yet, a not insignificant proportion of professionals are worried about job security in the short term.

2. Introduction

2.1 Background to the Study and Why CFA Institute Surveyed its Members

CFA Institute is the global association of investment professionals that sets the standard for professional excellence and credentials. The organisation is a champion of ethical behaviour in investment markets and a respected source of knowledge in the global financial community. Our aim is to create an environment where investors' interests come first, markets function at their best, and economies grow. There are more than 170,000 CFA charterholders worldwide in 162 markets. CFA Institute has nine offices worldwide, and there are 158 local member societies. For more information, visit www.cfainstitute.org or follow us on Twitter at @CFAInstitute and on Facebook.com/CFAInstitute.

A Historical Perspective

The economic crisis we are currently going through is unprecedented in that it is self-inflicted as a common societal response to the medical emergency caused by the coronavirus.

It is special from a historical perspective because contrary to preceding crises, this one did not have as trigger a real economic shock or imbalance of some sort and neither was it the result of high-flying financiers fiddling with markets, insider trading, interest rates, debt, currencies, or derivatives. The economic recession in the 1980s and the ensuing stagflation had been caused by the two preceding oil shocks in 1973 and 1979. Black Monday in 1987 is believed to have been triggered by a sudden realisation that indebtedness was maybe becoming a problem. The Great Bond Massacre of 1994 was caused by a hawkish monetary policy twist by the US Federal Reserve that forced overly leveraged bond portfolios to liquidate positions. The 1997 and 1998 crises in Asia and Russia had to do with currency imbalances and untenable pegs to the US dollar. The 2007–08 subprime crisis started in the United States as a collapse of the housing bubble, which got compounded by excesses in structured finance and created worldwide ramifications thanks to the globalisation of financial markets—a global financial and liquidity crisis ensued. In 2010–2012, the Euro area suffered its most severe currency and monetary crisis, starting with fears of a Greek default.

This time, with the current crisis that started around February 2020, there was no liquidity dislocation, equity markets were performing well, and the global economy was

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

still on a positive growth path. We could argue these relatively good times were perhaps single-handedly supported by a seemingly never-ending expansionary monetary policy, as well as rising indebtedness of governments, households, and corporates, but there was no sign of an imminent collapse so long as consumption kept going.

This crisis was simply created by a sudden voluntary stoppage in economic activity, a coordinated demand and supply shock. By 29 March 2020, some form of lockdown had been instated in 47 countries, and this figure had risen to 80 countries by the end of April.[1]

The Economic and Market Impact Was Real and Severe

Naturally, the impact on the global economy and markets was immediate and severe. It was like a mathematically logical and engineered chain reaction that should actually have come as no surprise. Economist Paul Krugman referred to this situation as a "medically induced coma" that would require a massive dose of fiscal aid, more akin to "disaster relief" than to a stimulus package.[2] In terms of observable impact, by the end of March through the early days of April 2020—that is, before the government packages took effect—the global economy had taken a nose dive:

- Global stock markets dropped by 20% to 30% as compared to January.
- The implied S&P500 volatility index (CBOE VIX), at 82, reached levels last seen in 2008.
- Credit spreads were sharply on the rise for financials and corporates.
- Unemployment made an almost instantaneous and historically unprecedent jump after steadily falling in the United States since 2010. By end-April 2020, the total number of unemployed in the United States had reached 30 million. According to the US Treasury, the US unemployment rate could reach 20%, a level unseen since the 1930s Great Depression.
- Oil prices saw an 18-year low at USD23.00 per barrel (Brent crude).
- Of course, OECD shattered global growth forecasts.

[1] See Aura Vision, "Global Covid-19 Lockdown Tracker," regularly updated, accessed 21 May 2020, https://covid19-lockdown-tracker.netlify.app/image.png.
[2] Paul Krugman, Twitter, @paulkrugman, 31 March 2020.

How Governments and Authorities Reacted

Governments and central banks then decided to enact record-breaking economic relief programs through fiscal policy, government spending, and monetary policy. Central banks also sought to lift some pressure off markets by giving clear signals they would act as buyer and market maker of last resort.

On 27 March, the US Congress passed the CARES Act, which includes both spending and loan guarantee programs, worth overall between USD2.0 trillion and USD6.0 trillion, which compared to a 2019 total federal spending amount of USD4.45 trillion.[3]

In the EU, the European Central Bank (ECB) announced an economic stimulus program worth EUR750 billion on 19 March 2020. The central bank said in a statement the governing council had decided to launch a temporary asset purchase program to navigate the economic downturn across the eurozone linked to the coronavirus outbreak. The program should last until the end of 2020. Under the new program, called the Pandemic Emergency Purchase Programme (PEPP), the central bank would buy both public and private securities in a "flexible manner." According to the ECB, "The governing council will terminate net asset purchases under PEPP once it judges that the coronavirus COVID-19 crisis phase is over, but in any case not before the end of the year." The central bank indicated it could still go further. Judging by what has happened since and early May announcements, the ECB did indeed decide to implement further market support measures.

So what was CFA Institute's Intention with this Survey?

Through its global membership, CFA Institute is uniquely positioned to participate in the ongoing debate about the potential effects of the crisis on capital markets and investment management.

Yet, prudence was of the essence as, by definition, we could not analyse current events from the prism of historical situations of stress or with the benefit of hindsight.

This survey and the accompanying study are just one example of how CFA Institute has endeavoured to be a source of stabilisation and clarification as markets and commentators continue to grapple with tremendous difficulties in analysing the unfolding underlying trends:

[3] H.R. 748, CARES Act, Public Law 116-136, Congressional Budget Office, 27 March 2020, https://www.cbo.gov/publication/56334.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

- The Systemic Risk Council (sponsored by CFA Institute) made a series of recommendations for ways the financial and economic authorities can respond to the economic elements of the current pandemic health crisis.[4]
- CFA Institute Research resources – Coronavirus and Market Volatility section. As we continue to gauge the long-term impact of the novel coronavirus, CFA Institute is working to provide resources and to support the development of policy measures that address the functioning of markets and the financial system. We are providing research—including analysis on lessons learned from past financial crises—to help guide the investment management industry during this time of instability and uncertainty.[5]
- On 7 April 2020, Egon Zehnder and CFA Institute virtually convened 24 CEOs from asset management firms across Asia, Oceania, Europe, and North America for a discussion of the impact that COVID-19 is having on their sector. Marg Franklin, CEO of CFA Institute, asked the audience how they were responding to the changing environment. Among topics discussed were the reaction of employees and clients, change management, operational flexibility, technology, stewardship, and environmental, social, and governance (ESG) issues.[6]

The current exceptional circumstances and the subsequent reaction of authorities are directly impacting the normal functioning of financial markets and practitioners. With this survey and the accompanying study, CFA Institute has aimed to clarify how experts and professionals active in the various sectors of capital markets and investment management think about the effects of the current crisis.

Several perspectives are analysed:

- economic situation and potential recovery
- market impact on volatility, liquidity, and price formation
- interventionism of governments and central banks

[4] "SRC Statement on Financial System Actions for Covid-19," Systemic Risk Council, accessed 20 May 2020, https://www.systemicriskcouncil.org/; SRC, "Proposed Measures to Address Economic Elements of Current Pandemic Crisis," 19 March 2020, http://4atmuz3ab8k0glu2m35oem99-wpengine.netdna-ssl.com/wp-content/uploads/2020/03/SRC-signed.pdf.
[5] "Coronavirus and Market Volatility," Research & Analysis, CFA Institute, accessed 21 May 2020, https://www.cfainstitute.org/en/research/coronavirus.
[6] Egon Zehnder, "Asset Management: 'All Firms Will Be Remembered by How They Treat Employees and Clients,'" Asset Management, 27 April 2020, https://www.egonzehnder.com/industries/financial-services/asset-management/insights/asset-management-all-firms-will-be-remembered-by-how-they-treat-employees-and-clients.

- regulatory response
- overview of ethics in times of crisis
- impact on the asset management business model and role of finance
- changes, if any, to the active versus passive debate
- preliminary analysis of CFA Institute members' employment situation

2.2 Survey Details and Methodology

CFA Institute set out to survey its members on the effects the coronavirus-induced economic crisis is having on capital markets in general and the investment management industry in particular. We have sought to clarify the debate and public commentary on a few aspects particularly relevant for our core membership and touching upon the economy, regulatory intervention, market impact, ethics, asset management business model, and employment in the financial space.

The survey was fielded to the global membership of CFA charterholders across all regions and jurisdictions where the organisation has representation.

The survey was sent on 14 April 2020 and closed on 24 April 2020.

A total of 167,312 individuals received an invitation to participate. Of those, 13,278 provided a valid answer, for a total response rate of 8%. The margin of error was +/-0.8%. See Appendix 1 for a detailed review of the survey's demographics.

2.3 Highlights

Key highlights and statistics from the survey are as follows:

- **On the shape of a potential economic recovery.** The data show that most respondents are on the conservative side of the spectrum as compared to industry and banking CEOs, who appear more optimistic. Of these respondents, 44% see a medium-term hockey stick–shaped recovery, which implies some form of stagnation for two to three years before we see a steady pickup. A further 35% are seeing a U-shaped recovery, essentially mildly more optimistic in the short term than the hockey stick. Only 10% are envisaging a quick V-shaped recovery. It is worth

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

pointing out that only 4% are prophesying long-term economic stagnation, similar to what economist Nouriel Roubini has been alluding to (i.e., the lost decade of the 2020s). Finally, we should mention that the answers given on this question show no significant regional differences.

- **On market volatility.** A large majority of approximately three-quarters of respondents are either still analysing how volatility is moving before they make a decision on strategic asset allocation or are seeing no significant impact from a strategic standpoint. The other one-quarter have significantly modified their strategic allocation. On this last metric measuring if firms have had to change their allocation, respondents from Latin America (44%) and South Asia (38%) appear to have been more affected by volatility jitters than have respondents in Europe (26%) and North America (22%).

- **On market liquidity**. There are significant variations per type of asset and region. For investment-grade corporate bonds in developed markets, a large majority of three-quarters of respondents believe that liquidity is down, yet 40% overall have seen a positive stabilisation impact from the central bank intervention. The picture is reasonably similar for government bonds in developed markets. However, central bank intervention seems to have had a lesser impact on emerging markets, with one-half of respondents seeing liquidity of government bonds and equities down over there. Liquidity in global developed market equities seems to have suffered less from the market rout, with 31% believing the level of liquidity has dropped. Of note, only a minority thought we are facing a severe liquidity shock that could result in fire sales and dislocation, potentially indicating that markets at large are not panicking; the highest figure on this issue was found with respondents in Africa, Southeast Asia, and East Asia, of whom 29%, 28%, and 27% respectively thought emerging market equities were facing a severe liquidity shock. Southeast Asia respondents were also, conversely, at 26%, the region to believe the most in an actual uptick in liquidity, in this case for government bonds in developed markets.

- **On the risk of specific asset mispricing.** A resounding 96% of respondents believe the crisis could result in asset mispricing specifically related to the current situation, with no regional variations. In equal proportion, respondents indicated that the two reasons why this would be the case are liquidity dislocation (38%) and distortion of natural market pricing because of government intervention (36%). Respondents in Asia were most concerned with liquidity (45% to 48%) whereas North America and Europe showed higher levels of concern about public authorities distorting prices (39%). Of note, dubious professional practices and ethics did not cause concern (2%) as regards asset mispricing.

- **On government and central bank interventionism**. Overwhelmingly, respondents seem to indicate the swift intervention of governments and central banks to support the

economy and markets was a necessary stabilising factor. However, there is division on whether this aid should be pursued further: Equally supported are that this interventionism will be insufficient because it will need to be continued (49%) and that this aid is short term and should be stopped as soon as possible to allow a deleveraging accompanied by fiscal rigour. Respondents in South Asia (61%) and the Middle East (59%) were the most to think that the intervention would be insufficient and would need to be sustained. Conversely, respondents in North America were proportionately more likely to think this intervention, although a valid stabilising factor, would need to stop as soon as possible so that deleveraging could take place with some degree of fiscal rigour.

- **On regulation of financial services in times of crisis.** Over half of respondents overall believe that conduct regulation should not be relaxed to encourage trading and liquidity. At the same time, respondents seem to believe that regulators have a role to play in the crisis response and its aftermath: Thus 69% think regulators should actively seek the appropriate response through consulting with industry, and over half believe they should design specific regulatory mechanisms to help restart market activity. At a regional level, respondents in North America seem more often inclined to refuse regulatory intervention altogether on the basis that markets should be able to fix themselves (23%) versus 19% in Europe and 13% in South Asia. This latter region was also the one where 38% of respondents agree regulation should be relaxed versus 26% overall.

- **On circuit breaker and trade-stopping rules.** The results are not pointing to a clear trend either way, yet 45% believe to some extent the rules are working as intended and are ensuring fair, efficient, and orderly markets in current conditions; 25% disagree. Respondents in North America were more inclined to vindicate these rules than overall. Of note, only 54% of respondents who indicated they work for a regulator or government agreed the rules are working efficiently.

- **On what regulators should and should not do.** Respondents are clear on a number of points. A large majority agree companies that receive emergency support during the crisis should be banned from paying dividends or executive bonus compensation (75%). They also believe a ban on short selling should not be considered (83%); a review of exchange-traded funds (ETFs) behavior during the crisis should be initiated to determine the nature of their impact (84%); regulators should focus on investor education about risk of investor fraud in times of crisis (94%); regulators should focus on market surveillance (82%); regulators should not consider imposing security market holidays (82%); and regulators should not consider temporarily permitting companies to delay reporting on changes in their financial conditions (73%). In terms of regional differences, North America respondents were particularly allergic to short-selling bans (91%) and were also comparatively more opposed to allowing delay in financial reporting changes (80% versus 60% in South Asia and 70% in Europe). It is interesting to note that the

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

results were a bit more nuanced on whether regulators should suspend non-essential rulemaking and examinations until the crisis has passed (59% in favour overall, with again North America least in favour [57%] and South Asia most in favour [72%]).

- **On professional ethics in times of crisis**. Results are not perfectly clear-cut. Overall, 45% of respondents think it is likely the crisis will result in unethical behavior on the part of the investment management industry, with 30% neutral and 25% disagreeing. There are interesting localized differences, with less developed markets in general seeing a higher risk in this regard.
- **On the message the financial industry should deliver to the public.** Overwhelmingly, respondents agreed the markets are an important part of how the economy operates and the public should know they continue to function in such unprecedented conditions (44%), as well as advocating for the public not to engage in panic selling or market timing (41%).
- **On the long-term and structural effects the crisis may be having on the financial services industry.** Equally as important with close to 40% of respondents choosing each one of them are, first, large-scale bankruptcies and, second, an acceleration of automation to reduce fixed costs. At 34% of response frequency, further consolidation was also a theme, on a par with further divergence between emerging and developed markets and, finally, a potential reduction in the globalization of financial markets.
- **On active versus passive investments.** The largest portion of respondents (42%) believe it was unlikely the crisis would reverse the steady shift into passive investments from active investing, but 31% think it would.
- **On the employment situation of members and their firms.** Responses indicate that it may be too early to tell or that while staying prudent, firms have not made drastic changes at this stage. Notably, 54% of respondents see no change in their firm's hiring plan, and 36% report seeing a hiring freeze. Only 9% are reporting a downsizing. Respondents in East Asia and the Middle East seem more affected as they reported their firms had initiated a downsizing in 18% of cases, respectively. Members who work at firms in manufacturing and utilities (e.g., oil and gas, energy) indicated in a higher proportion that their firm is downsizing (30% and 21% respectively).

  At a personal level, 77% of respondents reported no change to their situation, 12% are concerned about their job security in the short term (26% in the Middle East), and 1% reported to have lost their job. A statistically significant relationship exists between what respondents' thoughts are on the recovery and what their sentiments are on their current employment status. Of those expecting a quick V-shaped recovery, 83% indicated the crisis is not affecting their job.

3. Details of Results

3.1 A Conservative Economic Recovery—Which Alphabet Letter will it Be?

The debate about which form of economic recovery may materialise has been raging since day one of the decision to lockdown and forcibly subdue economic activity. This debate essentially pitches two camps, with some degree of interconnectedness between their proponents.

The first camp seems to bank on a quick and steady recovery, provided the lockdown does not endure for too long. That first camp has been the territory of a few barons from some specific industrial corners, like technology (see, e.g., Apple CEO Tim Cook in April 2020 on a possible V-shaped recovery[7]) or banking (see, e.g., Goldman Sachs chief strategist Peter Oppenheimer at the end of February on the temporary nature of the impact,[8] and see ex-CEO Lloyd Blankfein in early March on the sound economic fundamentals in the United States;[9] also see Standard Chartered PLC group pointing at the end of April 2020 to a possible rapid recovery in China and other emerging markets, as well as a global economy coming out of recession by the end of the year[10]).

The other camp tends to be a meeting zone for international organisations, institutional economists, and central bankers who believe the recession may be severe and will affect the fundamentals of the economy to the point that any recovery will be slow and difficult. A few statistics, predictions, and statements are worth keeping in mind:

[7] Lisa Eadicicco, "Apple CEO Tim Cook Reportedly Told Trump That He Predicts a V-Shaped Economic Recovery from the Coronavirus Pandemic," Business Insider, 24 April 2020, https://www.businessinsider.fr/us/apple-ceo-tim-cook-tells-trump-v-shaped-economic-recovery-2020-4.
[8] Hanna Ziady, "Investors Are Betting on a Quick Recovery from Coronavirus. What If They're Wrong?" CNN Business, 22 February 2020, https://edition.cnn.com/2020/02/21/business/company-earnings-coronavirus/index.html.
[9] Lloyd Blankfein Twitter, @lloydblankfein, 9 March 2020; Theron Mohamed, "Goldman Sachs Ex-CEO Lloyd Blankfein Predicts a 'Quick Recovery' for Markets from Coronavirus," Markey Insider, 9 March 2020, https://markets.businessinsider.com/news/stocks/goldman-sachs-ex-ceo-lloyd-blankfein-sees-fast-coronavirus-recovery-2020-3-1028977728.
[10] Sumeet Chatterjee and Lawrence White, "StanChart Sees Key Markets Leading Quick Economic Recovery After Loan Losses Hit First Quarter," Yahoo News, 29 April 2020, https://uk.news.yahoo.com/stanchart-profit-falls-12-coronavirus-043636134.html.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

- The IMF projected in its April 2020 outlook report that the world economy would contract by 3.0% in 2020.[11]

- The World Bank gave in March 2020 a bleak outlook about poverty trends in East Asia and the Pacific. Its baseline scenario considers that almost 24 million fewer people will leave poverty status across the region in 2020 as a result of the economic crisis. The forecasts point to growth in the region slowing to 2.1% as compared with an estimated expansion of 5.8% in 2019.[12]

- The European Commission announced in its Spring Economic Forecast that the eurozone economy could shrink by 7.75% in 2020, which would eclipse the 2009 economic record of the global financial crisis.[13] Economy commissioner Paolo Gentiloni warned that "the economic downturn would be sending debt and deficit ratios in the EU soaring and then give way to an uneven recovery in 2021."

- German Bundesbank president Jens Weidmann gave his opinion on 5 May 2020 that "measures to constrain and combat the coronavirus pandemic [lockdowns, social distancing] are likely to remain in place for a long time, meaning a rapid and strong economic recovery is relatively unlikely."

- The Bank of England (BoE) announced in its Monetary Policy Report (May 2020) that the UK economy could decline by around 25% between March and May. For the whole of 2020, the BoE considers the GDP could be falling by 14%.[14] For historical comparisons, the BoE mentioned this sudden drop would be the steepest since 1706.

In this context, CFA Institute members appear to have a conservative or prudent view of what the potential economic recovery could look like.

Close to 80% of respondents think the recovery will be slow to stagnant in the short term, before picking up eventually in the medium term. A medium-term recovery in the shape of a hockey stick (44%) indicates an essentially stagnant economy for two to three years before a steady upward trend, while a "U" shape (35%) indicates a slow (subdued) pickup after reaching the bottom, followed by a later acceleration phase, probably within three to five years.

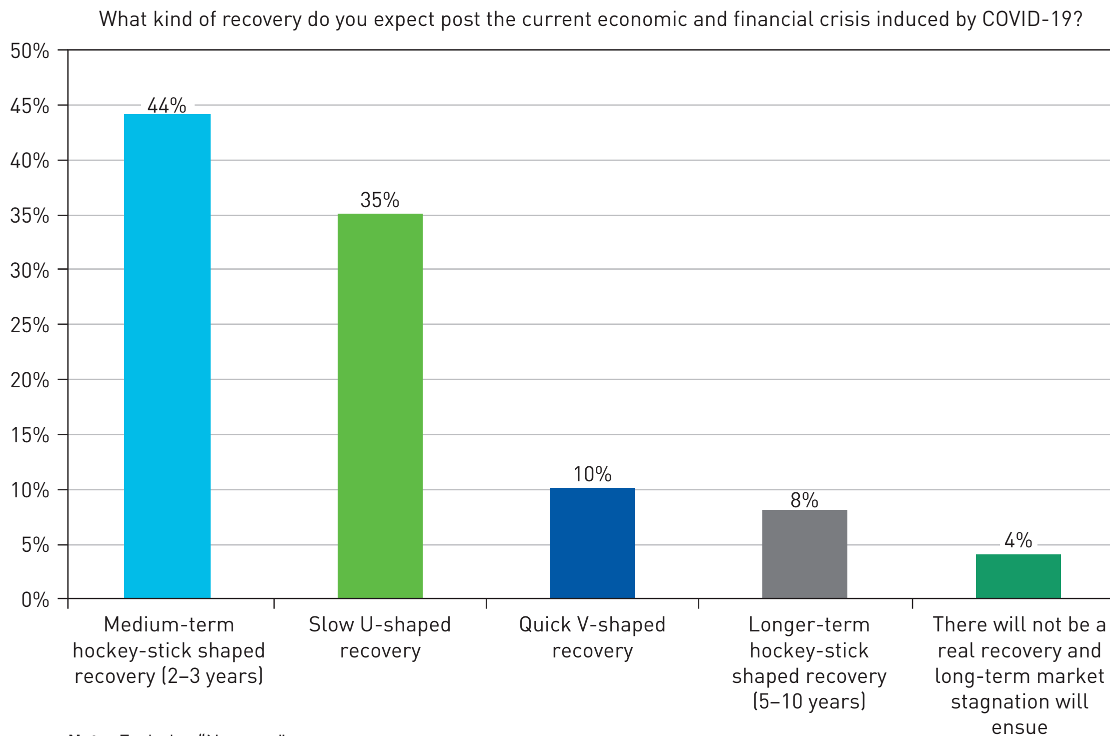
---

[11] "World Economic Outlook, April 2020: The Great Lockdown," International Monetary Fund, April 2020, https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020.

[12] "The World Bank in East Asia Pacific," World Bank, last updated 16 April 2020, accessed 20 May, 2020, https://www.worldbank.org/en/region/eap/overview.

[13] European Commission, "Spring Economic Forecast," May 2020, https://g8fip1kplyr33r3krz5b97d1-wpengine.netdna-ssl.com/wp-content/uploads/2020/05/Spring-2020-Economic-Forecast.pdf.

[14] Bank of England, "Monetary Policy Report," May 2020, https://www.bankofengland.co.uk/-/media/boe/files/monetary-policy-report/2020/may/monetary-policy-report-may-2020.pdf.



Note: Excludes "Not sure"

It is interesting to note that only 10% of respondents are expecting a quick and strong recovery, or the famous "V" shape, which could show relative conservatism among members.

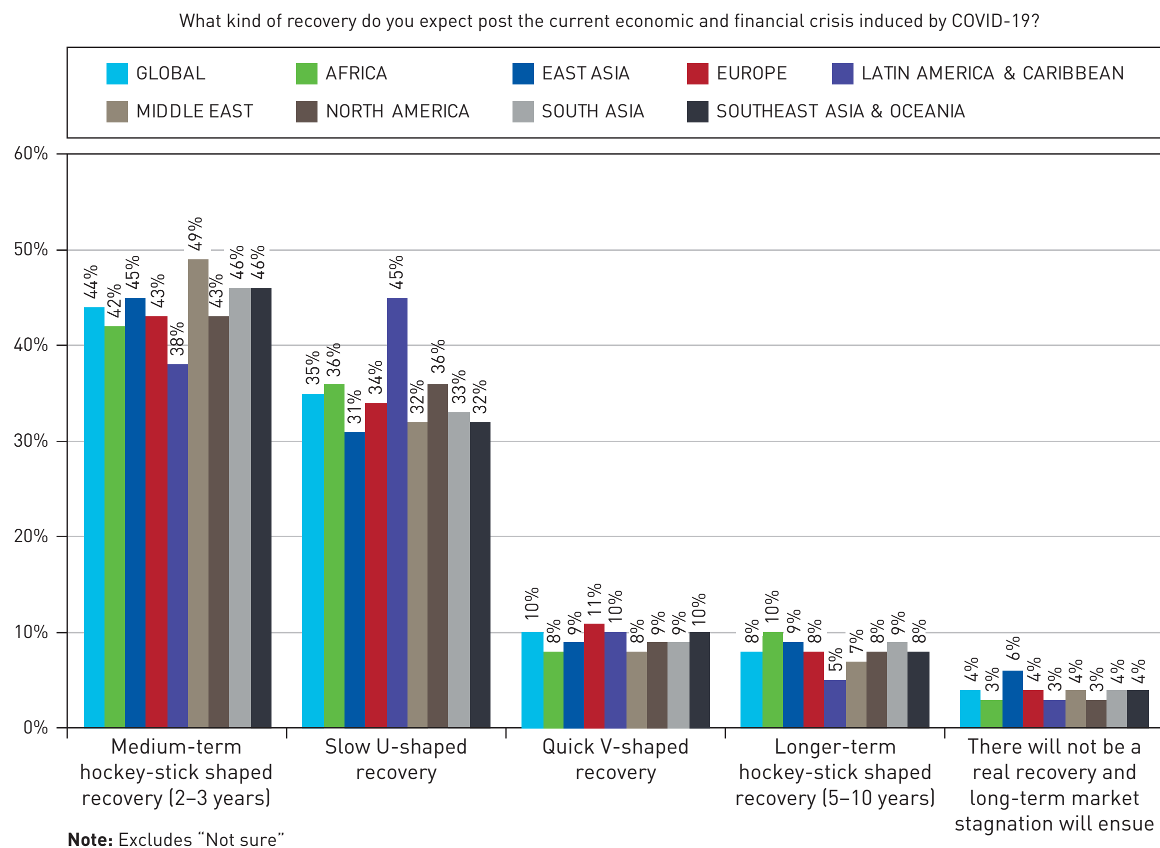
Equally, only 4% seem to favour a fairly negative long-term stagnation scenario, such as that described in part by economist Nouriel Roubini in early March 2020,[15] referring to a "lost decade of the 2020s." A parallel can be established with Japan's lost decade of the 1990s.[16] Japan's economic success of 1970–1980 is thought to have been fuelled by low interest rates, which in turn had encouraged stock market and real estate speculation to a point where the government had to raise interest rates, which led to a stock market crash and a debt crisis. Japan's economy has essentially been stagnating ever since, ridden by the agonies of deflation.

[15] Theron Mohamed, "Coronavirus Will Send Stocks and Oil into 'Free Fall' and Shrink the Global Economy, 'Dr. Doom' Economist Warns," Business Insider, 9 March 2020, https://markets.businessinsider.com/news/stocks/nouriel-roubini-predicts-stocks-price-oil-free-fall-coronavirus-recession-2020-3-1028977265.

[16] Justin Kuepper, "What You Can Learn from Japan's Lost Decade," The Balance, 18 September 2019, https://www.thebalance.com/japan-s-lost-decade-brief-history-and-lessons-1979056.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

The survey showed no meaningful regional differences regarding the expected shape of the recovery.



Commentators will seek to read a potential future for the world economy in early signs of strength or weakness in China's economy after its gradual reopening beginning in April 2020. One question could be about the apparent pickup in China's April exports:[17] Does it indicate inventories have been reducing while a pickup in demand from other Asian countries is added to a backlog of orders, or will this recovery be short lived as global demand remains subdued?

[17] See "Coronavirus: China's Medical Supply Boom, Lockdown Backlog Sparked Surprise April Exports Rise," *South China Morning Post*, 7 May 2020, https://www.scmp.com/economy/china-economy/article/3083357/coronavirus-chinas-medical-supply-boom-lockdown-backlog; or "China Exports Rebound in April on Pick-Up in Asian Demand," *Financial Times*, 7 May 2020, https://www.ft.com/content/06b25266-2921-4cdf-b7d2-499d33793e65.

The shock to the supply side of the equation will also be analysed. Proponents of the output gap theory include Paul Krugman.[18] The theory argues that we need to pay attention to the longer-term structural hit to the supply side caused by the crisis, which would make any recovery subdued as the lost capacity may not recover by itself, precipitating the economy into deflation, which would be equivalent to a direct and definite destruction of a portion of the economy. This is in part why Krugman had been arguing that the US Cares Act is unlikely to be sufficient and that a bigger relief program would be needed to keep the supply capacity intact in case demand returns—a neo-Keynesian approach to ensuring the economy can recover if both supply and demand come back together to their pre-crisis levels. In *Path Dependence and Pandemics in a Classical Growth Model*,[19] academics Thomas R. Michl (Colgate University) and Daniele Tavani (Colorado State University) explain how "a temporary unfavourable shock to the output capital ratio will permanently reduce the employment rate." The question will therefore become: How long can the economy sustain such radical measures as the current lockdowns in force in many regions of the world before it gets structurally and irreparably damaged?

3.2 Finance Professionals Circumspect in the Face of Volatility and Liquidity—Could Mispricing be an Issue?

With the survey, CFA Institute wanted to measure if market jitters observed since February, following the decisions in various parts of the world to lock down economies, have had a direct and immediate impact on financial firms and their investment strategy.

In traditional investment management theory, strategic asset allocation is focused on long-term objectives, whereas tactical asset allocation allows a certain degree of short-term flexibility to react to market changes and volatility.

In the case of the coronavirus crisis, it was not immediately clear if the observed and significant market moves had prompted professionals to re-evaluate their allocations or if they had chosen to face the music until further clarification.

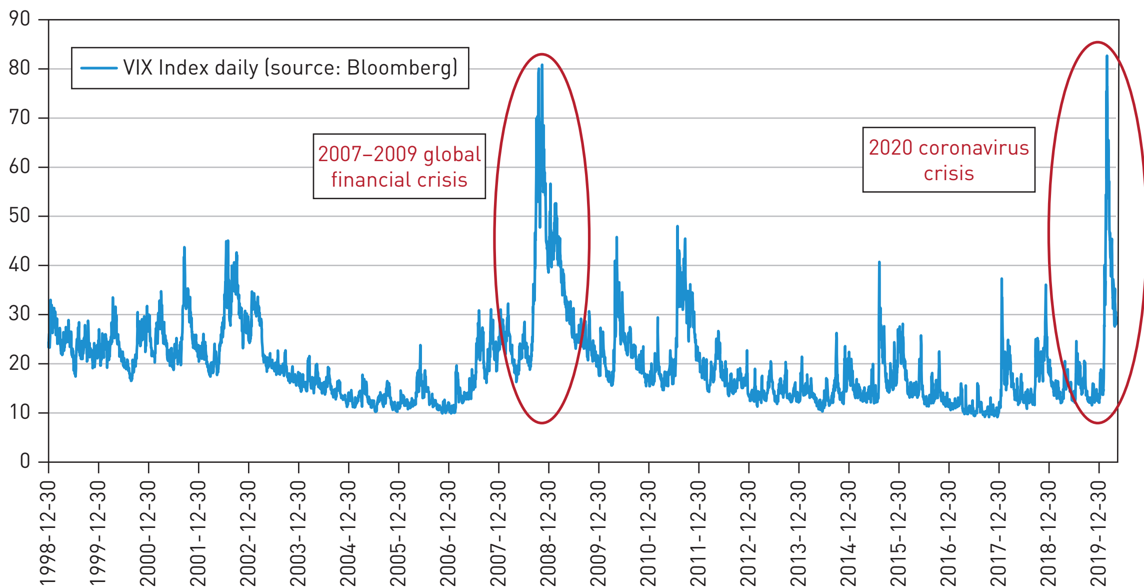
[18] Paul Krugman, "About That Deflation Risk," *New York Times*, 4 February 2009, https://krugman.blogs.nytimes.com/2009/02/04/about-that-deflation-risk/.
[19] Thomas R. Michl and Daniele Tavani, "Path Dependence and Pandemics in a Classical Growth Model" (working paper, PERI: Political Economy Research Institute, University of Massachusetts, Amherst, 30 April 2020), PERI, https://www.peri.umass.edu/publication/item/1283-path-dependence-and-pandemics-in-a-classical-growth-model.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

We chose to focus our market analysis on two dimensions: volatility and liquidity. The ultimate objective was to measure if there was a risk that the specific market situation caused by the coronavirus crisis could harm the normal price formation process and if so, to determine the likely causes.

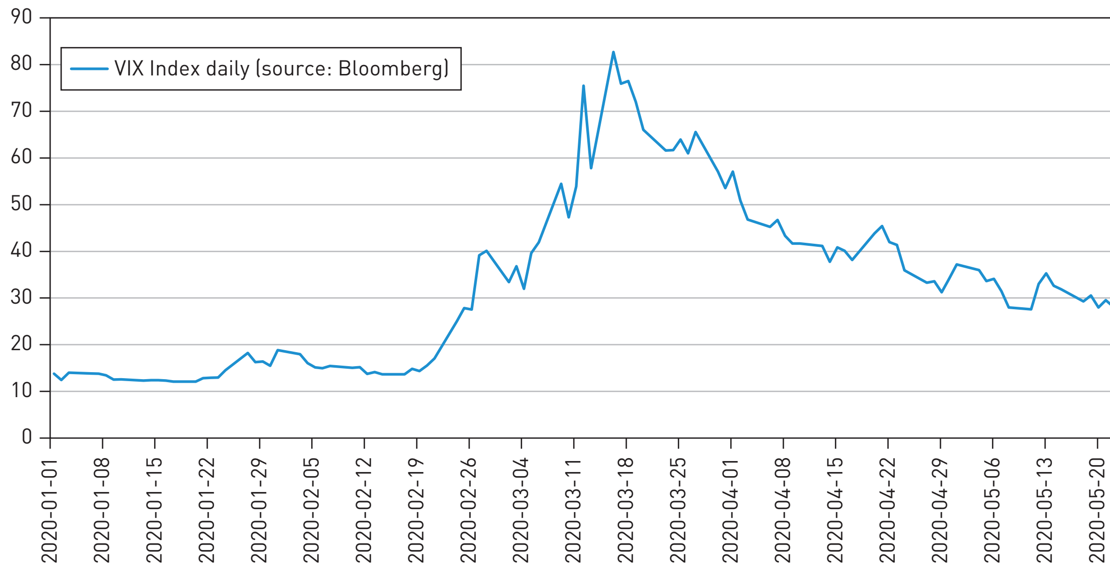
As shown on **Charts 1 and 2** (source: Bloomberg), equity volatility initially reacted very strongly and quickly to announcements of lockdowns and the immediate effects on employment and economic activity seizure, with the VIX Index in the United States going back to levels last seen during the 2008–09 global financial crisis (the VIX measures the implicit volatility of the SP500 options traded on the CBOE). Yet, government and central bank interventions calmed those markets significantly, which is reflected in the results of the survey.

CHART 1. VIX INDEX (SINCE 1998)



Source: Bloomberg

CHART 2. VIX INDEX (YTD 2020)

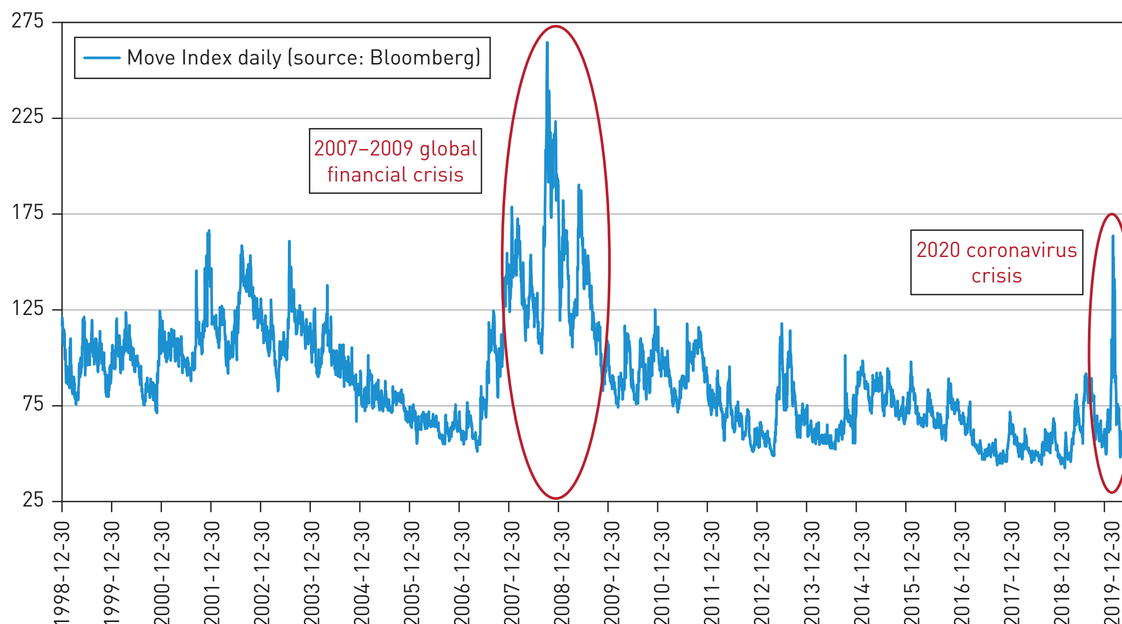


Source: Bloomberg

The story is similar for bonds, using as reference the MOVE Index published by ICE BoA ML (see Charts 3 and 4). The index measures the implicit volatility of options on US Treasuries for two-, five-, 10-, and 30-year maturities.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

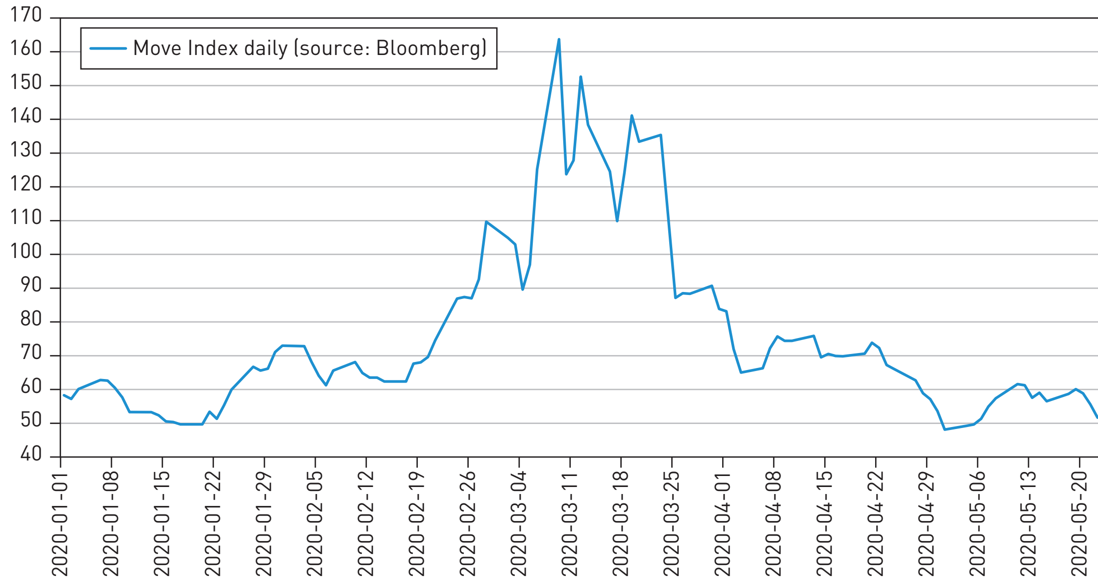
CHART 3. MOVE INDEX (SINCE 1999)



Source: Bloomberg

On the liquidity in bond markets, an indirect measure to use are the spreads of credit default swaps (CDS), which provide an estimation of the cost of insuring against the risk of default of various different bond and fixed-income instruments, whether sovereign or corporate. Larger CDS spreads indicate the market's level of fear is also rising, which may in turn result in underlying instruments' liquidity diminishing on expectations of credit rating downgrades or outright defaults. As **Charts 5 and 6** indicate (source: Bloomberg and Markit), CDS spreads on investment-grade corporate bonds in North America, Europe, and Asia ex-Japan have strongly risen on the effects of lockdown announcement in February and March, before retreating on governments' relief programs and central bank expansionary monetary policy decisions. It is worth noting that these CDS spreads have not reached the levels seen during the 2007–09 global financial crisis.

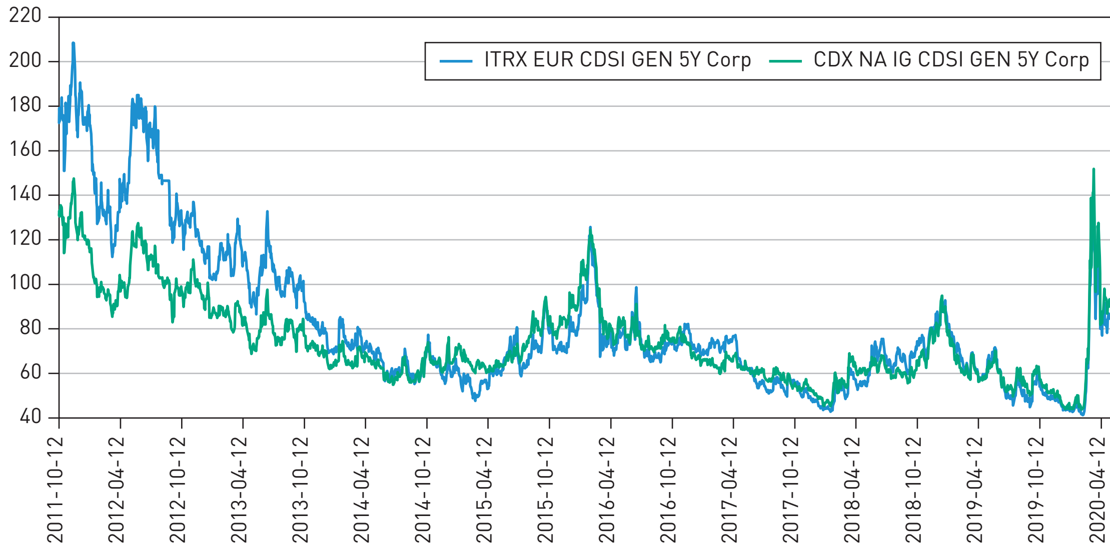
CHART 4. MOVE INDEX (YTD 2020)



Source: Bloomberg

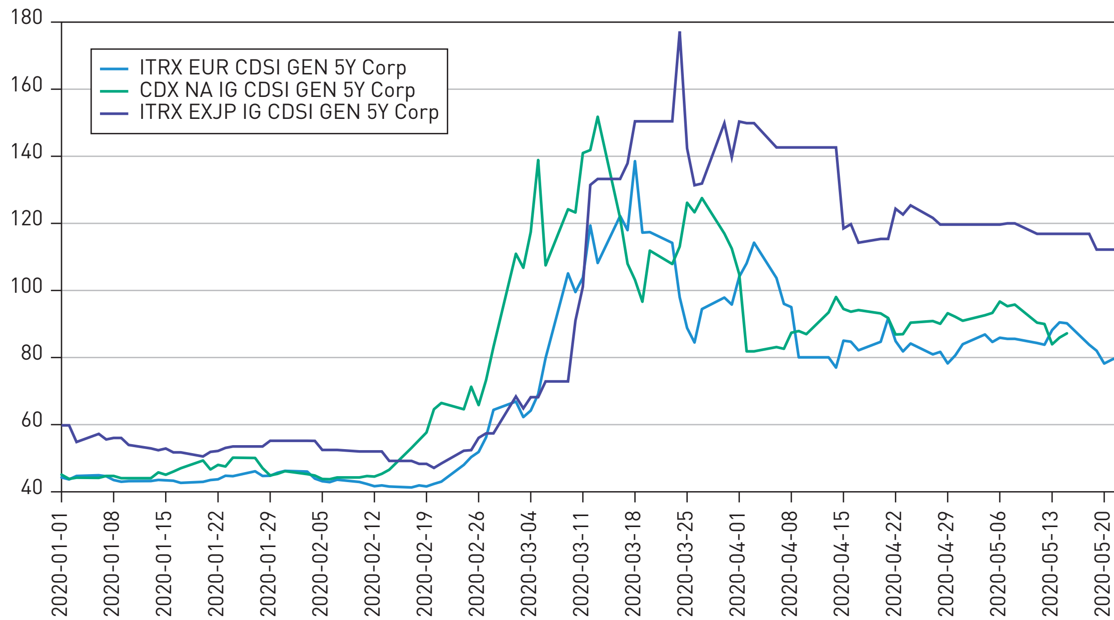
© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

CHART 5. CDS SPREADS FOR INVESTMENT-GRADE CORPORATE BONDS IN THE US AND EUROPE—MARKIT ITRAXX AND CDX (SINCE 2011)



Source: Bloomberg and Markit

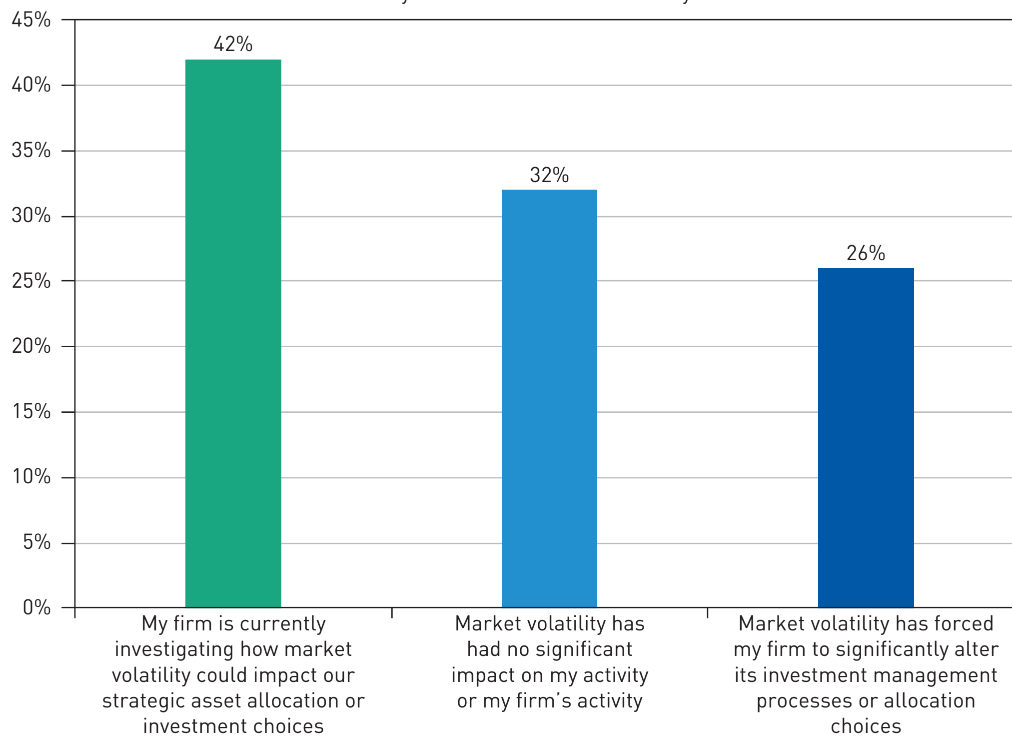
CHART 6. CDS SPREADS FOR INVESTMENT-GRADE CORPORATE BONDS IN THE US, EUROPE AND ASIA EX-JAPAN—MARKIT ITRAXX AND CDX (YTD 2020)



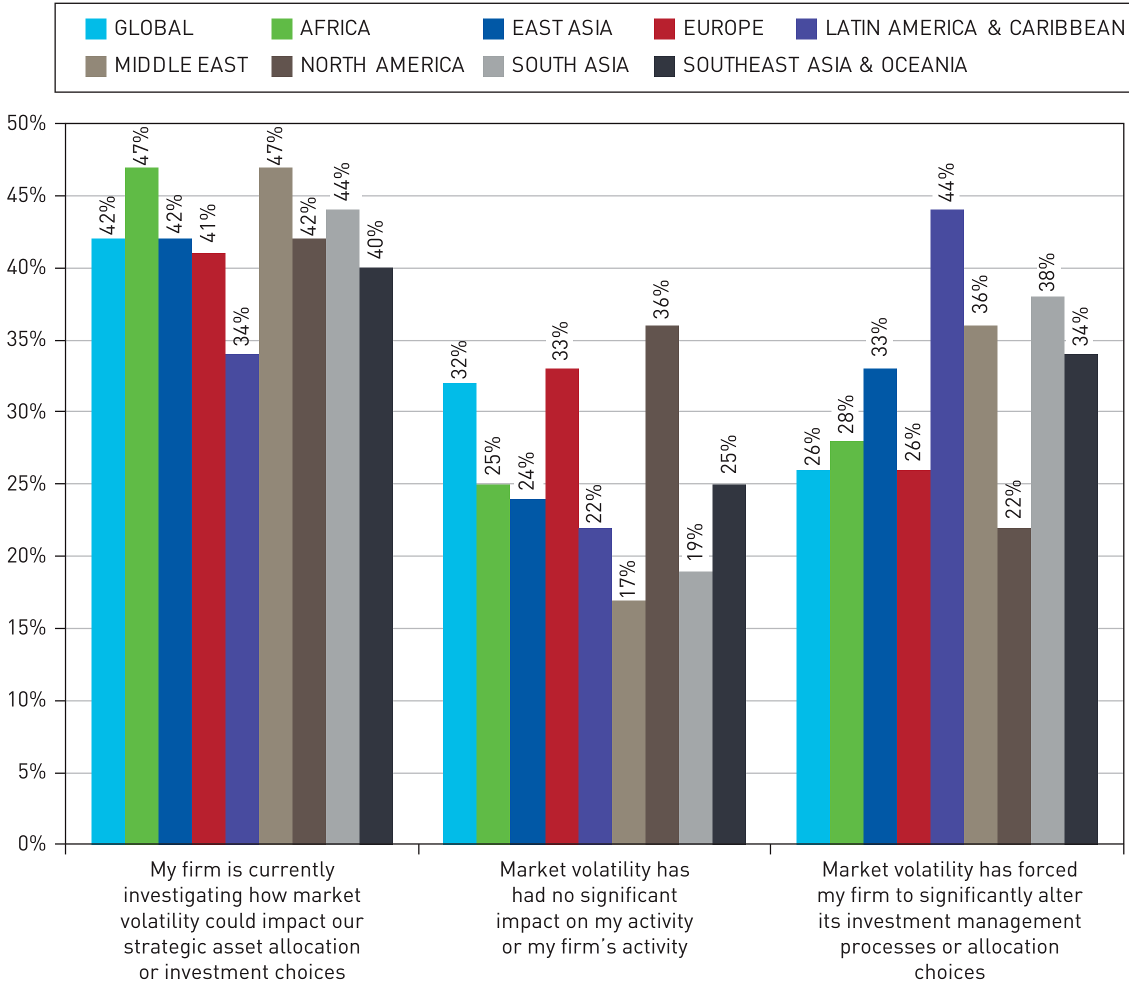
Source: Bloomberg and Markit

In the face of such market jitters, the CFA Institute membership appears to reflect that firms in general are staying cautious and are awaiting a clarification of market trends before considering making serious alterations to their investment strategy. Still, 26% have reported that their firms have had to make significant changes. Regionally, there seems to be a tendency for emerging markets to have been more severely impacted by market volatility, especially in Latin America and South Asia, where 44% and 38% respectively are reporting that their firms have had to alter allocation choices.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.



Note: Note: data excludes "Don't Know" and "Not relevant for me"



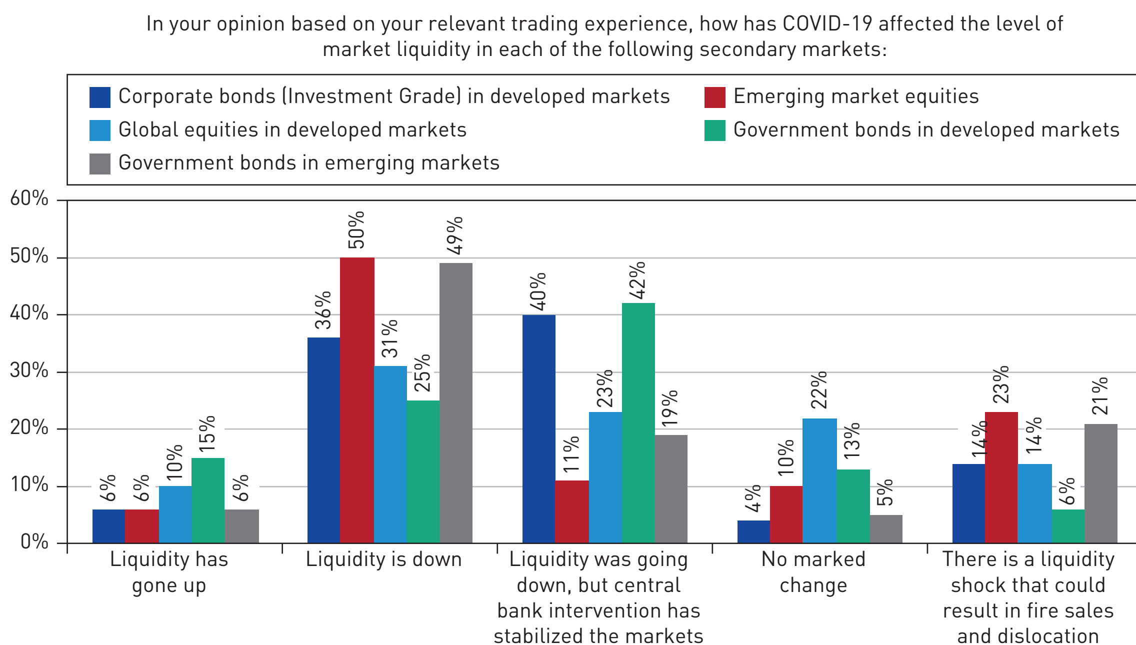
Note: Note: data excludes "Don't Know" and "Not relevant for me"

The question pertaining to market liquidity has also yielded interesting results, which vary quite significantly depending on the type of asset and the region under consideration. The general conclusion is that liquidity has been affected across the board, yet that government and central bank intervention has had a serious stabilising effect. This stabilising effect has, however, not been as effective in emerging markets as it has been in developed markets. Worthy of note is that central bank intervention is perceived to have been significantly more impactful in corporate and sovereign bond developed markets than for

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

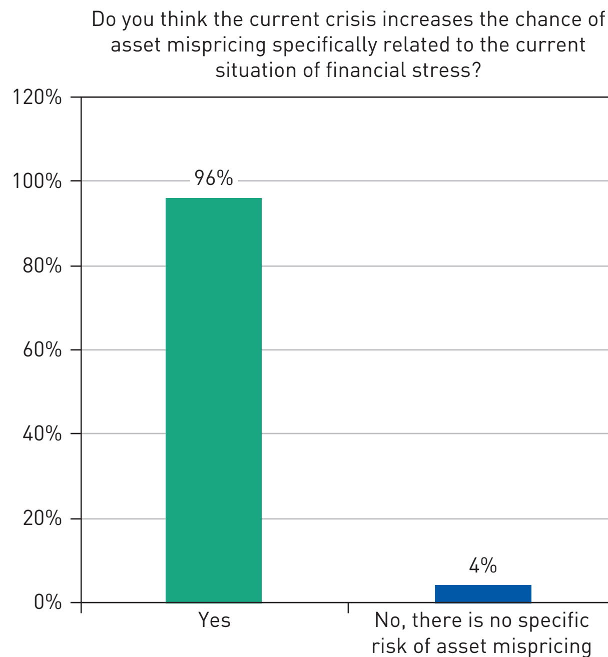
equities. This could indicate yet again that bond markets in general were benefitting from serious and direct central bank support even before the crisis and that this support continues to be necessary for bond markets to function.

Only a minority of respondents think we are facing a severe liquidity shock that could result in fire sales and dislocation, potentially indicating that markets at large are not panicking. The highest figure on this issue was found with respondents in Africa, Southeast Asia, and East Asia, of whom 29%, 28%, and 27% respectively thought emerging market equities were facing a severe liquidity shock.



Note: Excludes "Don't know" and "Not relevant for me"

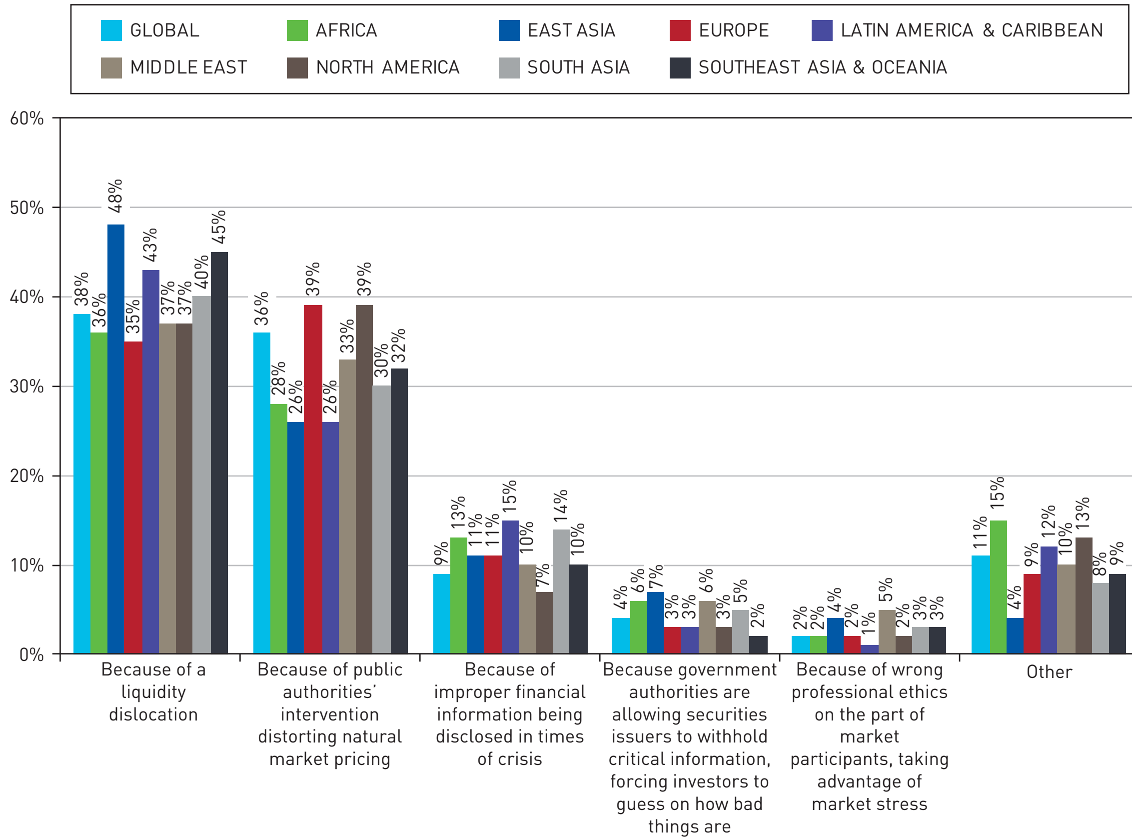
This analysis then takes us to the ultimate question related to the specific risk of asset mispricing. Overwhelmingly, respondents agree in largely similar proportions across regions that the current market conditions could give rise to a risk of asset mispricing.



Note: Excludes "Don't know"

At respectively 38% and 37%, liquidity dislocation and the distortion caused by public intervention were the two causes most often cited overall to explain how asset mispricing may take place. Of note, bad professional ethics was cited by only 2% of respondents overall. Respondents in Asia were the most concerned with liquidity (45% to 48%), whereas North America and Europe showed higher levels of concern about public authorities distorting prices (39%).

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.



Interpreting how market practitioners have reacted to public intervention is a theme that is explored as well in this survey and study. It will show the CFA Institute membership is not entirely settled on the necessity for authorities and central banks to intervene in markets or for how long this intervention should be sustained.

3.3 Public Authorities Have Rolled Out Heavy Support Artillery—Was this Warranted, Should it Stop, or Will We Need Life Support for Eternity?

In a new report released in May 2020, the Asian Development Bank (ADB)[20] predicted that "the global economy could suffer between USD5.8 trillion and USD8.8 trillion in losses—equivalent to 6.4% to 9.7% of global gross domestic product (GDP)—as a result of the novel coronavirus disease (COVID-19) pandemic."

Starting in March, public authorities, governments, and central banks around the world began implementing economic relief programs and expansionary monetary policies to support the economy and financial markets during the lockdown. We should think of these measures as a bridging facility between before and after the crisis, on the proviso that supply capacity must hold and consumption must also resume unabated reasonably quickly.

In the same report, the ADB estimated that "sustained efforts from governments focused on these measures could soften COVID-19's economic impact by as much as 30% to 40%."

The ADB based its estimations on a six-month scenario in each of the 96 countries analysed, between the beginning of the disease outbreak and the time when the economy begins to normalise. The analysis uses a model where various industries output and economic factors are shocked to determine impact.

Government and central bank measures have been unprecedented in their scale and depth and also in the clear messaging that authorities stand ready to intervene in unlimited proportions. Former ECB president Mario Draghi's words in July 2012, right in the midst of the euro crisis, spring back to mind: "Whatever it takes." Christine Lagarde, current ECB president, has now taken a similar stance: "There are no limits to our commitment to the euro."[21] Markets have therefore started to grow accustomed to central banks playing the role of lender and market maker of last resort at any time and under any circumstance.

[20] "COVID-19 Economic Impact Could Reach $8.8 Trillion Globally—New ADB Report," ADB, 15 May 2020, https://www.adb.org/news/covid-19-economic-impact-could-reach-8-8-trillion-globally-new-adb-report.
[21] Christine Lagarde, "Our Response to the Coronavirus Pandemic," European Central Bank, updated 19 May 2020, https://www.ecb.europa.eu/home/search/coronavirus/html/index.en.html.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

Public authorities' response has been of three different natures:

- central bank measures (monetary policy, public asset purchase programmes through quantitative easing, liquidity facilities)
- international organisations and supranational entities measures (financing of states by IMF, World Bank, EU, EBRD)
- national government measures

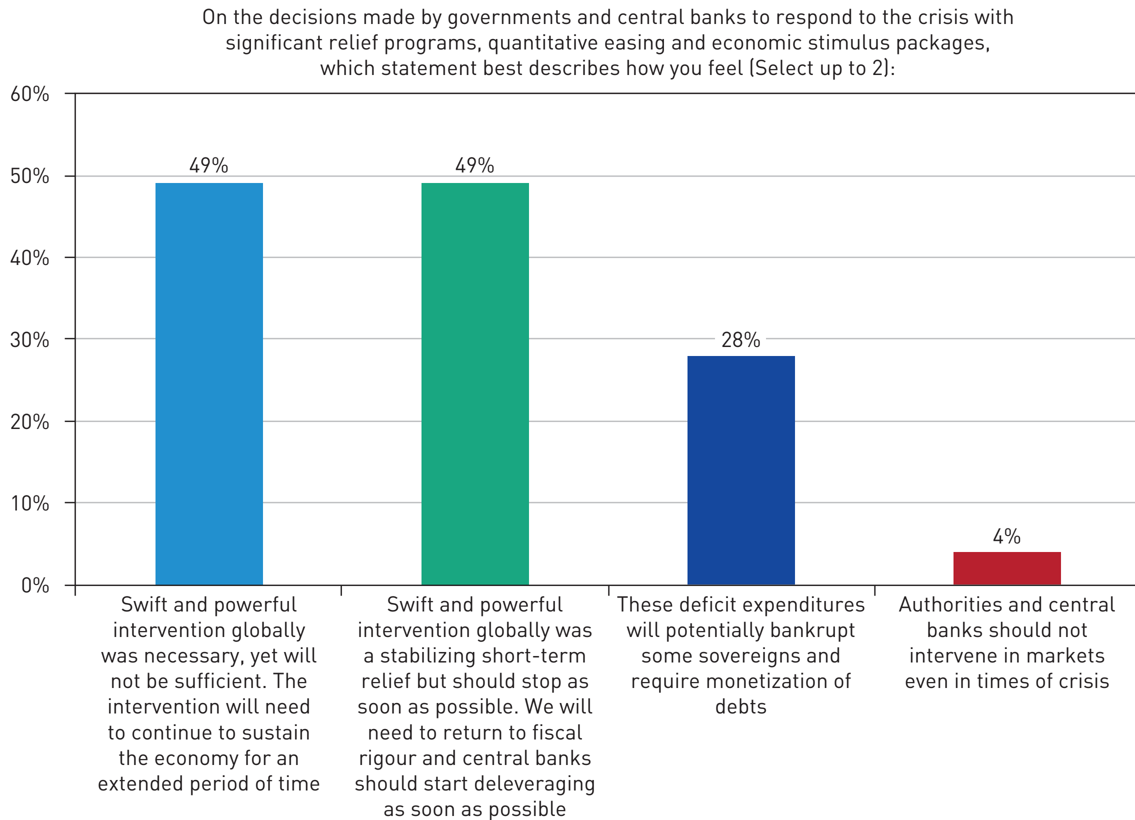
As explained in the introduction to this report, CFA Institute has worked with the Systemic Risk Council (SRC) on collating and digesting the operational details of these measures in key markets around the world after the SRC public letter on its recommendations for governments and central banks. Another good source on the details of these plans is regularly prepared and updated by BNP Paribas in its ECO Flash series on Covid-19 Key Measures.[22] These works together clearly show the great magnitude of public authorities' response to the economic crisis that is still unfolding.

Nevertheless, questions remain as to the economic soundness and rationale of these measures or, to the contrary, whether they will be sufficient—should we even consider pursuing relief for a prolonged period of time? We set out to question our membership on these concepts.

Economist Paul Krugman has taken a clear stance on this question. At the end of March, he was noting on social media network Twitter that the US relief program was unlikely to be enough in the face of the current economic shutdown: "We want massive, debt-financed disaster relief while the economy is in its medically induced coma."[23]

Here is how the membership answered our questions.

[22] "The Economic Research Portal," BNP Paribas, accessed 21 May 2020, https://economic-research.bnpparibas.com/Views/InterHomeView.aspx?Lang=en-US; and "COVID-19: Key Measures Taken by Governments and Central Banks," BNP Paribas Eco Flash, regularly updated, https://economic-research.bnpparibas.com/Views/DisplayPublication.aspx?type=document&IdPdf=38920&src=mail&publication=EcoFlash.
[23] Paul Krugman, Twitter, @paulkrugman.



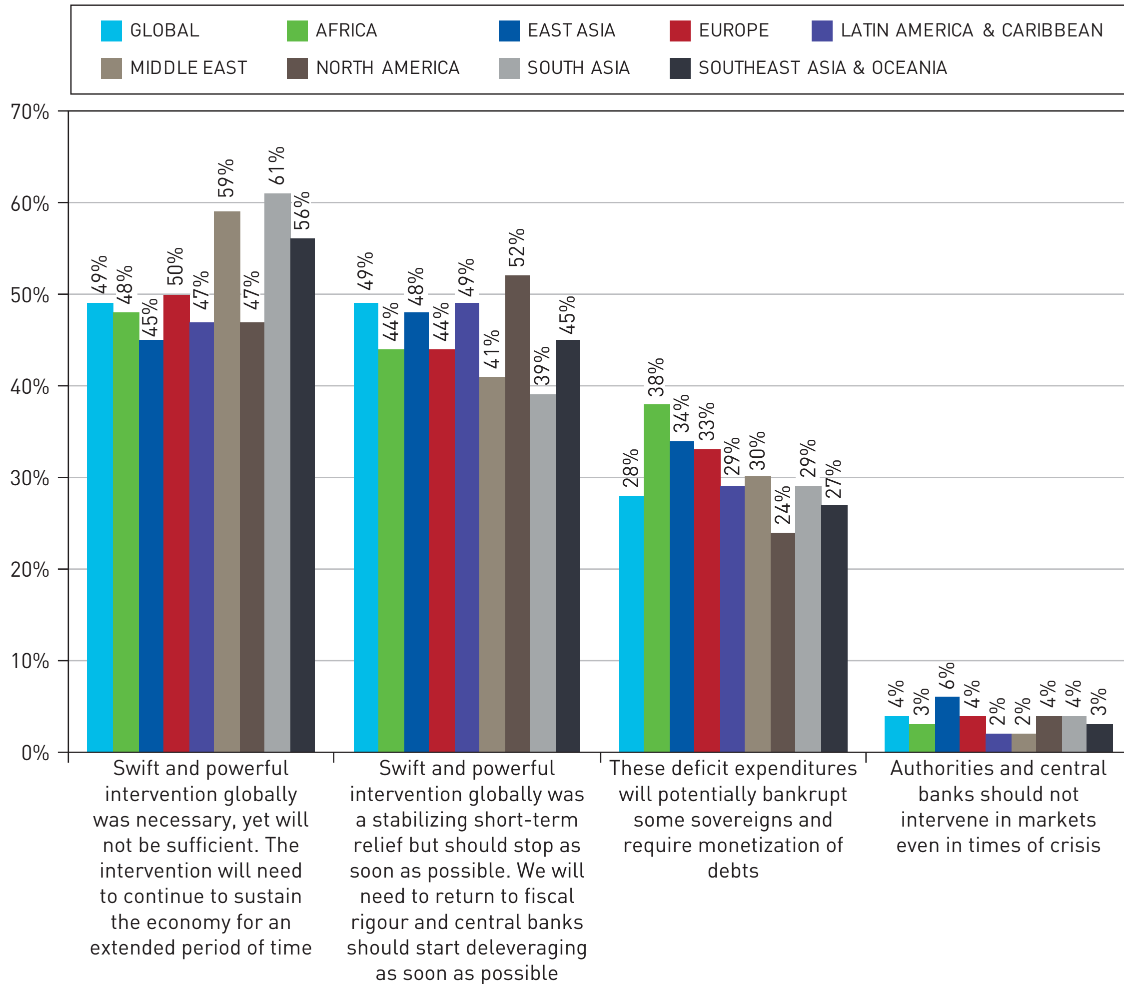
Note: Excludes "No opinion"

Overwhelmingly, respondents appear to vindicate that public authorities' intervention was necessary and/or a stabilising factor. A philosophical split then takes place on the notion of whether it should be sustained because it will be insufficient or, to the contrary, whether it should subside rapidly to permit deleveraging and a return to fiscal rigour. This is a fundamental question that pertains to the economic model society wishes to operate under. Both choices were chosen almost 50% of the time.

It is interesting to note that respondents believe there is a significant risk that the crisis and the accompanied relief measures may result in severe sovereign stress, leading to a potential monetisation of sovereign debts through quantitative easing and inflation.

As shown next, there are regional differences on the question.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.



Note: Excludes "No opinion"

At a regional level, Middle East and South Asia respondents most often expressed the belief that public authorities' intervention will not be sufficient and would therefore need to be sustained. Conversely, North America respondents most often expressed the view that relief and support programs would need to stop as soon as possible in order to return to fiscal rigour and permit a deleveraging of central banks' balance sheet. Of note as well, Africa respondents were most often indicating that deficit expenditures could lead to sovereign defaults and the need to monetise debts.

3.4 A Regulatory Conundrum—To Relax or not to Relax, to Ban or not to Ban?

Financial markets are like a massive aircraft carrier cruising high at sea with its accompanying fleet. When the waters are calm and the horizon is clear, the armada cruises gently towards its destination without the need to alter its course in any significant manner. When a storm comes, the admiral can be tempted to give a brutal shift in direction, hoping to counteract the perceived effects on the course due to the swell and the winds. This reaction can have longer-term effects on the ship's behaviour and make it increasingly difficult to keep a steady course over time and through varying weather conditions, a problem magnified by the delay in reactivity to any steering shift due to the size of the ship.

After decades of expanding globalisation, financialization of the economy, crises in series, and interventionism of authorities disrupting the forces of supply and demand, policymaking and regulation have become a humongous patchwork of successive steering shifts in the form of thousands of pages of rules designed to counteract the effects of previous crises, in a perpetual motion of backwardation. In the EU, MiFID II alone—put together to address the issues from the 2008–09 global financial crisis and enforced in 2018—has been assessed at running over 7,000 pages long. In the United States, the Dodd–Frank Wall Street Reform and Consumer Protection Act, enacted in 2010 for similar purposes, was a 1,000-page law that resulted in over 22,000 pages of regulation.

In March 2018, an interesting report had been released by the RegTech Council; *A New Paradigm for Regulatory Change and Compliance*.[24] They had calculated that from 2009 and 2012, over 50,000 regulations had been published by the jurisdictions across the G20. Another observation was that financial institutions had been estimated to spending 4% of their total revenue on compliance, with the figure expected to rise to 10% by 2022. The point of the report was to explain that banks, financial firms, and regulators "need semantically enabled regulatory technology to deal with the huge, and constantly expanding, volumes of regulations"—a technologically advanced approach to writing and complying with financial regulation.

We may quickly here digress into the world of banking, which has been subjected to regulatory treatment similar to that faced by asset management in general—some would argue even more so. The Basel Committee on Banking Supervision (BCBS) epitomises

[24] JWG, RegTech Council (home page), accessed 20 May 2020, https://jwg-it.eu/regtech-council; and Tom Butler, Paul North, and John Palmer, "A New Paradigm for Regulatory Change and Compliance" (RegTech Council whitepaper), March 2018, https://www.bnymellon.com/emea/en/_locale-assets/pdf/our-thinking/regtech-council-weighs-in.pdf.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

this drive to generate ever-more complicated rules on prudential risk management and monitoring, to a point where it can be argued whether these rules continue to serve their original purpose of fostering responsible lending and market practices. On this question, a seminal speech given in 2012 by Andrew G. Haldane,[25] then executive director of financial stability at the Bank of England, sheds light on this propensity for regulators to confuse complication with security, thereby leaving little room for genuine anticipation and quality supervision.

In such a context as created by the coronavirus crisis, we wanted to know if CFA Institute members would favour some form of relaxation of the rules, and how they are enforced by market conduct regulators, at a time when firms are already dealing with formidable economic issues.

Regulatory authorities around the world have in general tackled this crisis by centring their communication and messaging around the following themes:

- On consumer protection, inform the public of possible scams and frauds.
- On markets, ensure that trading and capital formation remain functional and orderly.
- For firms, a reminder that they need to continue to treat their customers fairly through appropriate communication, pointing to a heightened frequency of monitoring.
- On financial reporting, remind firms of the importance of timely and informative financial information, yet regulators have decided to apply tolerance if firms are experiencing difficulties in releasing annual or quarterly reports on time.
- On conduct in general, regulators have been clear that expectations in terms of risk management and contingency planning remain fully enforced.

We cannot as such point to an actual relaxation of the rules. Yet, regulators in key international markets seem to have agreed a coordinated form of forbearance or tolerance on deadlines for reporting periodic financial statements. A specific accent has also been placed on the need to include information about the effects the current crisis may be having on firms' financials and operations—on this matter, the US SEC's Division of

[25] Andrew G. Haldane and Vasileios Madouros, "The Dog and the Frisbee" (speech presented at the Federal Reserve Bank of Kansas City 366th Economic Policy Symposium, Jackson Hole, Wyoming, 31 August 2012), https://www.bis.org/review/r120905a.pdf.

Corporate Finance has released a guidance on how it recommends firms assess and disclose the impact of Covid-19 on their financials, operations, controls, and procedures.[26]

In Europe, the European Securities and Markets Authority (ESMA) released detailed guidance and expectations as regards business conduct,[27] financial reporting, and corporate disclosures, including dates and forbearance guidelines, but also fund management periodic reporting, short-selling measures, and credit rating agencies supervision.[28]

A majority of respondents to our survey expressed the view that they disagreed with the idea that conduct rules should be relaxed to encourage trading and liquidity (50% overall). A minority of 21% thinks regulators should restrain themselves from any form of intervention and let the markets fix themselves—this point also corroborates other conclusions in this survey when questioning the membership on authorities' interventionism, which seems to be vindicated at least as a stabilising factor. In this regard, an interesting result shows that a large majority of respondents believe regulators have some role to play in this crisis, whether through specific measures designed to help markets restart or by proactively consulting with industry on possible solutions. Tentatively, one could infer that the underlying view about this question is that respondents in general believe the solution to the crisis will be found in cooperation between market forces and authorities, as opposed to one or the other alone defining the agenda.

At a regional level, Asia respondents seemed the keenest to accept the notion that conduct rules should be relaxed (38% and 39% respectively in South and East Asia).

We have also tried to drill down more precisely into the actual regulatory measures the CFA Institute membership believes were good and bad ideas. Overwhelmingly (94% overall), respondents agree with the notion that regulators should focus their attention on educating the public about the risk of frauds, which seems to be the case, given regulators' communication. Also important were the notions that a specific investigation should be conducted into the behaviour of ETFs during the crisis and the possible systemic ramifications (84%), or that regulators should not lower their guard on market conduct risk and therefore should continue to conduct examinations and enforcement actions. This latter idea is related to another question in the study about the risk that this crisis could result in unethical behaviour.

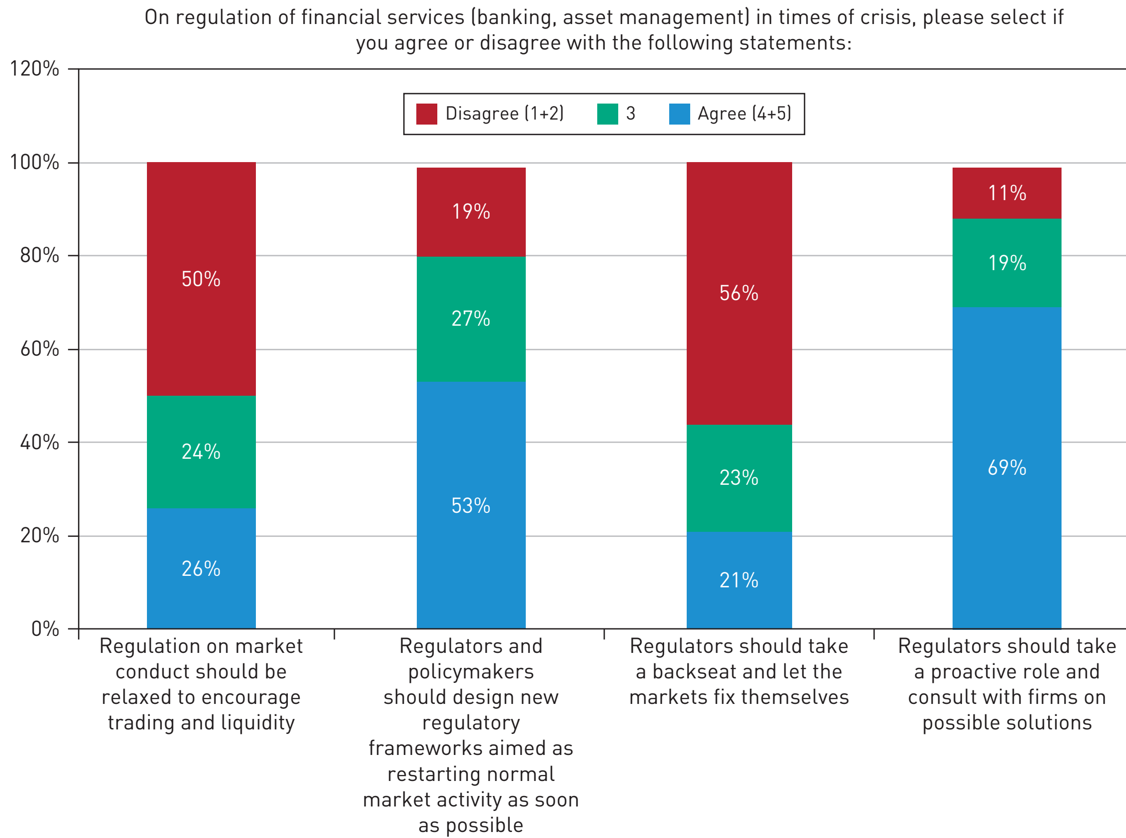
---

[26] "Coronavirus (COVID-19), CF Disclosure Guidance: Topic No. 9," SEC, Division of Corporation Finance, 25 March 2020, https://www.sec.gov/corpfin/coronavirus-covid-19.

[27] "ESMA Reminds Firms of Conduct of Business Obligations under MiFID II," ESMA, 6 May 2020, https://www.esma.europa.eu/press-news/esma-news/esma-reminds-firms-conduct-business-obligations-under-mifid-ii.

[28] "Covid-19," ESMA, accessed 20 May 2020, https://www.esma.europa.eu/about-esma/covid-19.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

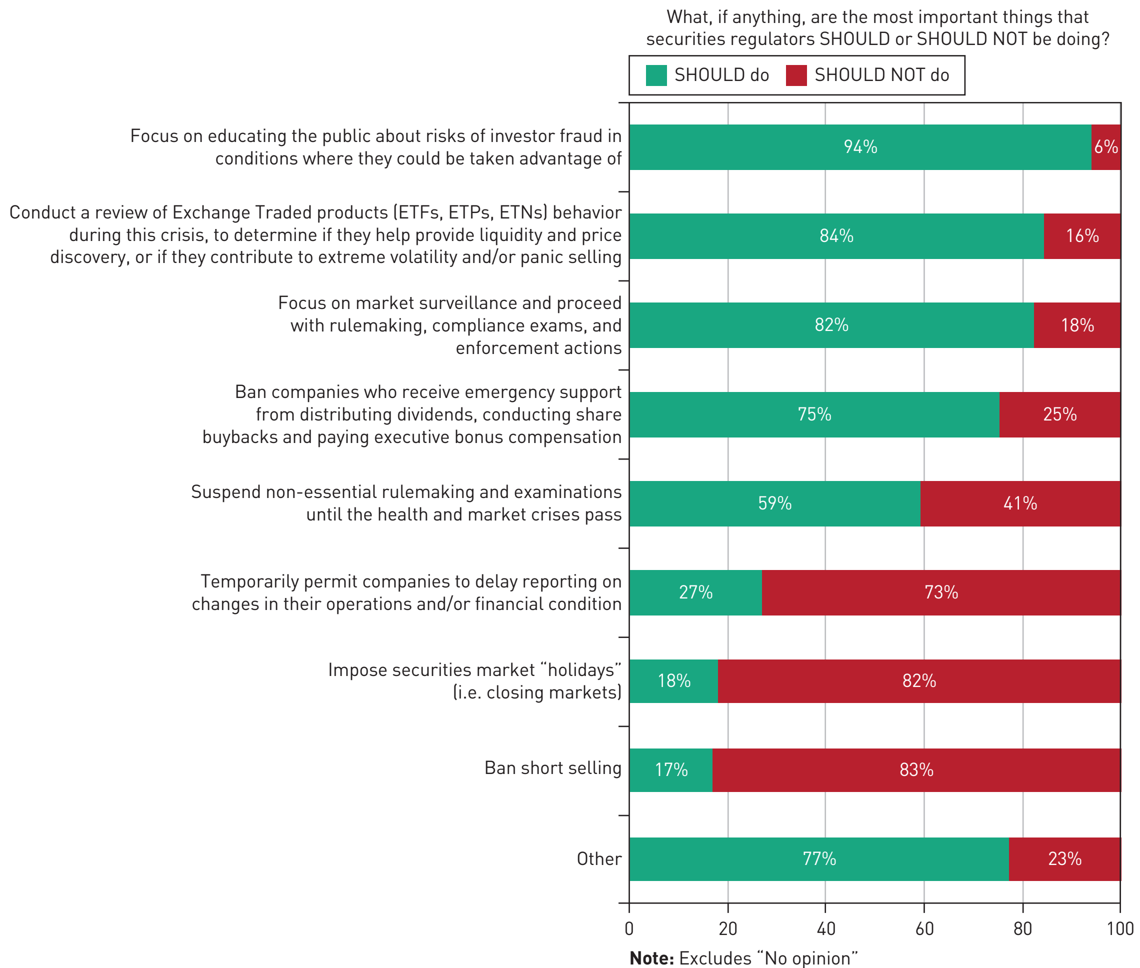


Scale: Strongly disagree 1 to Strongly agree 5

On ETFs and their potential systemic risk, CFA Institute released in January 2020 a research report that precisely explored how ETFs may affect market stability especially in times of crisis.[29] The survey results point to the importance for regulators to analyse how this increasingly important part of financial markets has reacted to the crisis and what will be the eventual impact on liquidity and volatility.

On the notion of corporate accountability, respondents in general favour restraint on the part of companies that receive emergency relief support, agreeing they should not be paying out dividends or awarding executive compensation. Respondents in general largely disagreed with permitting firms to delay reporting on changes to their operations or

[29] Maureen O'Hara and Ayan Bhattacharya, "ETFs and Systemic Risks", CFA Institute Research Foundation, January 2020, https://www.cfainstitute.org/en/research/foundation/2020/etfs-and-systemic-risks.



financials caused by the crisis, a testament to how important it remains for meaningful and timely information to continue to flow through markets. Respondents also largely refuted a ban on short selling.

A significant regional difference is observable on the question of corporate disclosures. Asia respondents (East and South) are much keener on allowing firms to delay reporting changes to operations and financials than are North America respondents (44% and 42% versus 20%).

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

Finally, we wanted to gauge the opinion of the CFA Institute membership on the functioning of circuit breaker rules triggered in March in various markets to prevent excessive volatility.

Circuit breakers are a mechanism that triggers a halt in equity trading if specific conditions of price drops or volatility are met. They are designed to prevent financial panics by allowing extra time to pause and reflect on the information that has been accumulated over a short period of time.

Circuit breaker mechanisms were historically first instated in the United States by the SEC after the Black Monday crash of 1987. They were then adjusted and recalibrated following the 2010 flash crash events on several US exchanges.

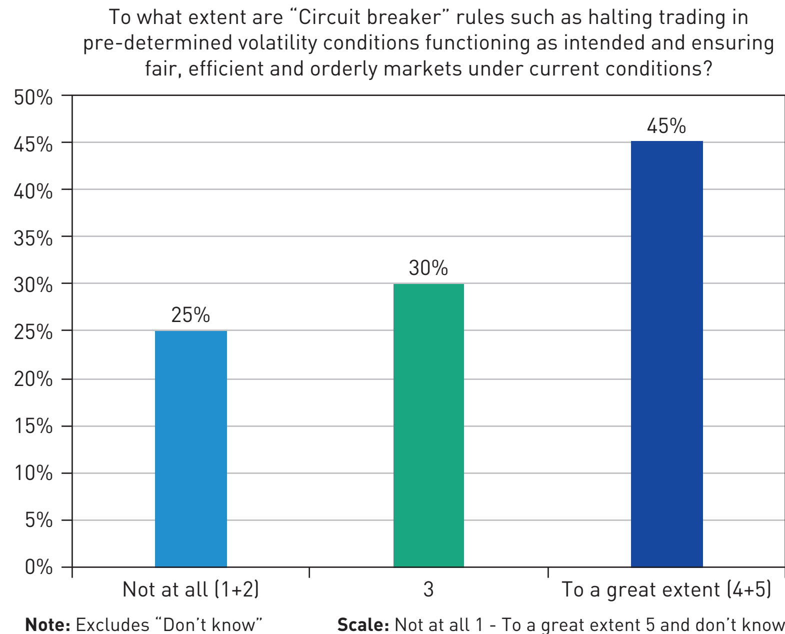
World markets have different approaches to such mechanisms. Several Asian markets, like China and South Korea, apply rules similar to those in the United States, although with varying calibrations for tolerated drops. Japan applies circuit breakers on futures and options contracts, while India applies its rules when markets go up or down by a certain degree. Europe does not apply market-wide trade halting mechanisms and focuses on security-specific circuit breakers when a particular stock price drops by more than a specified threshold. An interesting research paper had been released by ESMA on the market impact of circuit breakers in the EU in January 2020.[30] It endeavoured to analyse the dynamic interaction between circuit breakers and market events from three perspectives: the potential feedback loop between high frequency trading and algorithmic trading, the changing regulatory landscape of circuit breakers in extreme market conditions, and the potential for faulty feedback loop between different markets and their respective circuit breaker rules that may be coordinated by market actors (the spill-over effect). In Europe, it is deemed that security-specific circuit breakers are more effective and less prone to secondary market impact.

In the United States, circuit breakers were triggered four times during the month of March 2020. Several financial institutions and trading firms have been complaining that the halt occurred each time within a few minutes of the open and one time even within seconds.[31] A group has been working with the SEC to explore potential changes to the rules to prevent such quick reaction right after the open, which they deem inefficient or inappropriate.

[30] Cyrille Guillaumie, Giuseppe Loiacono, Christian Winkler, Steffen Kern, "Market Impacts of Circuit Breakers—Evidence from EU Trading Venues" (ESMA Working Paper No. 1, 2020), January 2020, https://www.esma.europa.eu/sites/default/files/library/esmawp-2020-1_market_impacts_of_circuit_breakers.pdf.

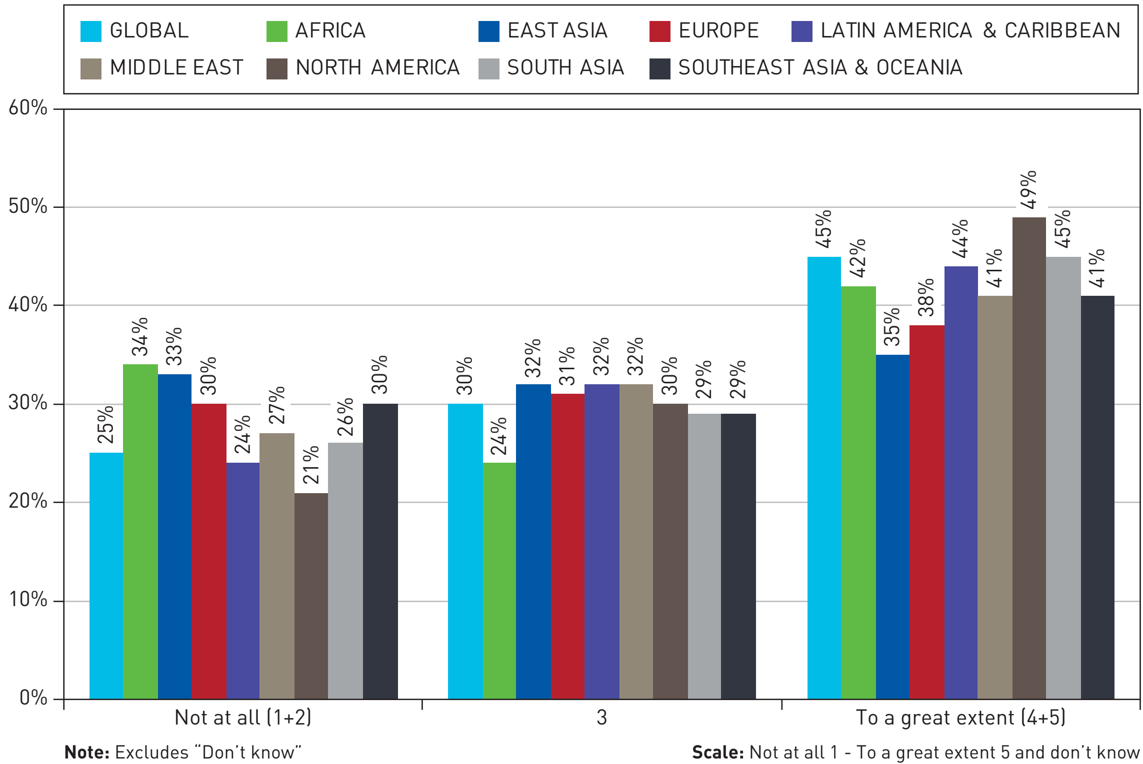
[31] Alexander Osipovich and Dawn Lim, "Wall Street Explores Changes to Circuit Breakers after Coronavirus Crash," Morningstar and Dow Jones, 15 April 2020, https://www.morningstar.com/news/dow-jones/202004154805/wall-street-explores-changes-to-circuit-breakers-after-coronavirus-crash.

The results of our survey are not entirely conclusive, with 45% of respondents overall agreeing that circuit breaker rules are functioning as intended and ensure fair, efficient, and orderly markets, especially under such extreme market conditions as experienced in February and March 2020. However, 25% disagree and 30% have no clear view one way or the other.



Regional results provide an interesting colouring of the picture across the various parts of the world that have been considered. Respondents in the most efficient market, in North America, were more frequent (49%) than those in other regions to believe circuit breaker rules are efficient and work as intended. The view from emerging markets is not clear-cut either, with variations across the board. Europe was an interesting case in hesitation, as 30% of respondents in the region disagreed about the efficiency of the rules (versus only 21% in North America who also disagreed).

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.



3.5 Ethics in Times of Crisis—Are Morals Stronger than Greed?

We have seen in the preceding section on regulatory intervention how regulators are worried the crisis may result in unethical behaviour by finance practitioners and markets in general—see Note 27 on ESMA's public statement related to business conduct. The regulator remarks in early May 2020:

> *Several National Competent Authorities (NCAs) have recently noticed a significant increase in retail clients' trading activity. The financial market turmoil following the COVID-19 pandemic has led to high market volatility and an increase in market, credit and liquidity risks. ESMA today highlights the risks to retail investors when trading under these unprecedented market circumstances.*

Professional ethics are naturally at the core of CFA Institute values. We therefore wanted our members' views on whether they believed the current coronavirus crisis could result in a heightened risk of unethical actions by the investment management industry.

It is interesting to establish a parallel with another important part of the CFA Program curriculum, that which discusses behavioural finance.

The reason for unethical deeds is explained by a behavioural analysis of people's decision-making process. Opportunities will arise to benefit from people's perceived irrational behaviour in the face of incomplete information, which gets exacerbated in times of crisis. As explained in the CFA Program curriculum:[32]

> *By focusing on actual behavior, behavioral researchers have observed that individuals make investment decisions in ways and with outcomes that differ from the approaches and outcomes of traditional finance. As Meir Statman so succinctly puts it, "Standard finance people are modeled as "rational," whereas behavioral finance people are modeled as "normal." Normal people behave in a manner and with outcomes that may appear irrational or suboptimal from a traditional finance perspective.*

In other words, a tendency to react irrationally to external shocks could lead to a higher potential for this attitude to be exploited.

It is probably in those testing times that we can measure if finance professionals can live up to the level of standards expected of them as fiduciaries to clients and the wider public. This is precisely where CFA Institute would like to position its credential and its Code of Ethics and Standards of Professional Conduct.[33]

The survey shows that the risk under consideration is not negligible. Overall, 45% of respondents believe it is highly likely or somewhat likely the current crisis will result in unethical actions by the investment management industry.

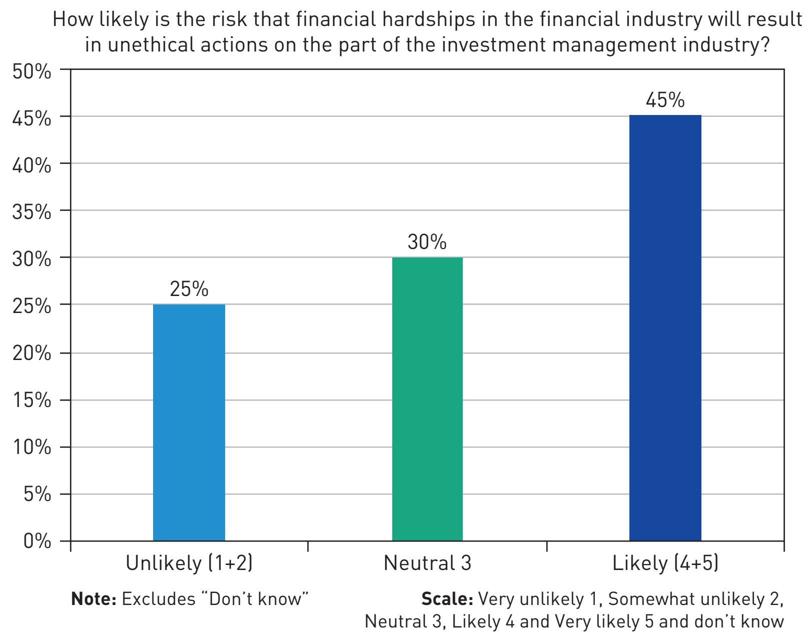
This is information that should be of interest to regulators as they analyse and monitor business conduct risk in financial markets.

---

[32] Michael M. Pompian, CFA, "The Behavioral Finance Perspective," CFA Program 2020, Level III, Reading 7, Portfolio Management.

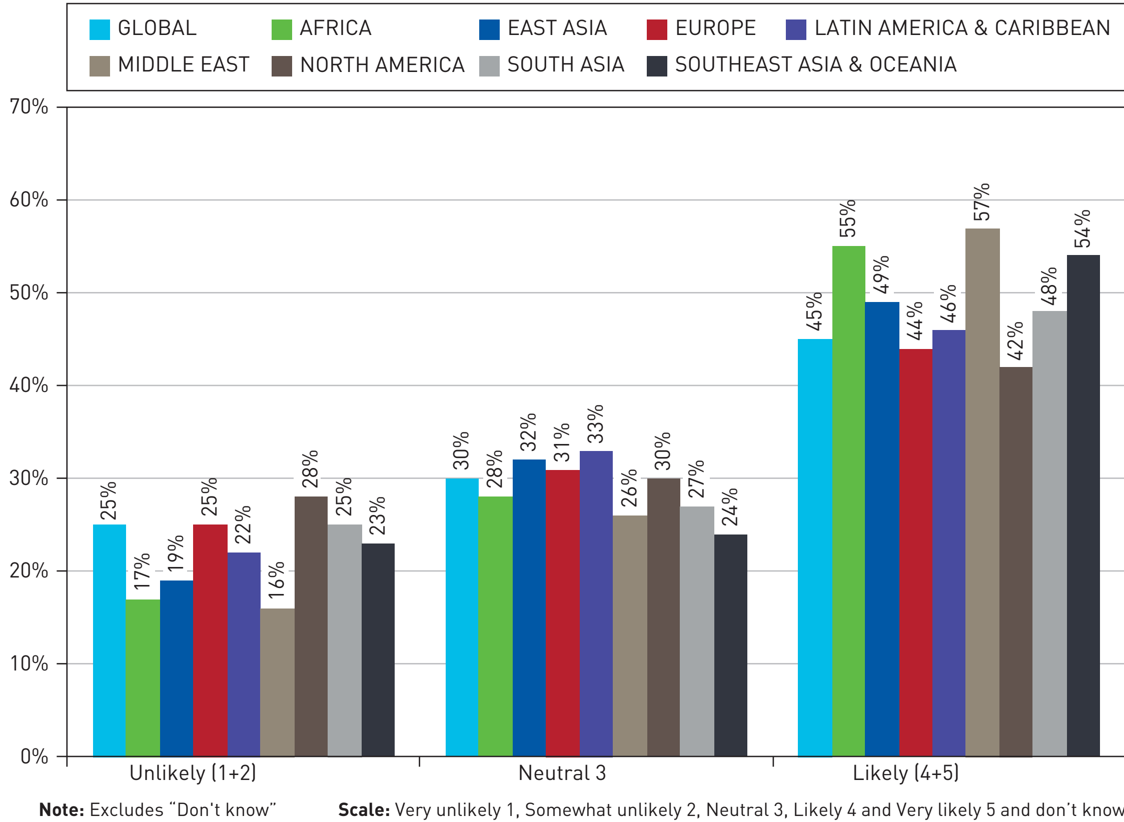
[33] "Code of Ethics and Standards of Professional Conduct," CFA Institute, accessed 21 May 2020, https://www.cfainstitute.org/en/ethics-standards/ethics/code-of-ethics-standards-of-conduct-guidance.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.



Note: Excludes "Don't know"

Scale: Very unlikely 1, Somewhat unlikely 2, Neutral 3, Likely 4 and Very likely 5 and don't know



Note: Excludes "Don't know" **Scale:** Very unlikely 1, Somewhat unlikely 2, Neutral 3, Likely 4 and Very likely 5 and don't know

There seems to be a regional correlation between the risk perceived and the degree of development of the markets in question. Respondents in emerging markets seemed more inclined to fear a risk of unethical behaviour than did those in developed markets in North America or Europe.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

3.6 Free Markets and the Economy—Do we even need Markets, and will there still be Private Companies Left?

In this section, we wanted to analyse if the current crisis would structurally change the relationship between financial intermediaries and society. How profoundly, if at all, will the crisis affect the business model and the value chain of asset management? Is the crisis affecting the very foundations of capital markets and the economic model?

The 2008–09 global financial crisis had already dented trust in financial markets and finance professionals. CFA Institute runs a regular survey of investor trust precisely to measure the quality of the ties between the finance industry and society at large. The fourth edition of the survey, conducted during Q1 of 2020, yielded interesting results on how the level of trust had changed since 2018:[34]

> ***Trust level differences****: There is a significant trust gap between investor segments: 65% of institutional investors trust the financial services industry, versus 57% of retail investors with an adviser and just 33% of retail investors without an adviser.*
>
> ***Trust direction:*** *The direction of trust also differs by segment. Overall, retail investor trust in financial services was slightly higher than in 2018 (from 44% to 46%), but institutional investor trust fell from 72% to 65%.*
>
> ***A fair system:*** *For retail investors without an adviser, only 57% say they have a fair opportunity to profit by investing in capital markets, but this increases to 81% for those with an adviser.*

We tend to think that each serious crisis will sound the death knell of any incumbent system. Only history will tell how this coronavirus crisis will have affected our current economic paradigm. We may actually simply continue staggering along as we have since probably the 1970s and 1980s, with a few shocks here and there putting into question every once in a while the sustainability of the existing equilibrium.

[34] CFA Institute, "Earning Investors' Trust" (CFA Institute investor trust study, 4th ed.), 2020, https://www.cfainstitute.org/en/research/survey-reports/2020-earning-investors-trust.

Consider these observations on the 2008–09 crisis:

- "I now fear that the combination of the fragility of the financial system with the huge rewards it generates for insiders will destroy something even more important—the political legitimacy of the market economy itself—across the globe" (Martin Wolf, chief economic commentator of the *Financial Times*, 2009).
- "The market system is in crisis" (Angel Gurria, secretary-general of the OECD, 2008).
- "What we are seeing right now looks like a very slow train wreck" (James Boughton, historian of the IMF, 2009).
- "The crisis that happens once in a century" (Alan Greenspan, former chairman of the US Federal Reserve, 2008).

It is too early to tell if the current crisis and whatever model may emerge from the ashes of capital markets will be another End-of-History type of moment,[35] a clear inflection point in history, or if the same economic model will gradually take back its rights along with a series of inevitable new policies aimed at reducing risk in the system or improve its resilience in the face of adversity. It is also possible that what we are going through at the moment is simply the normal process of creative destruction described by Joseph Schumpeter in 1942 as being an inherent part of a free market and capitalist economy.[36]

A few commentators have this time yet again been prophesying boldly about the consequences of the coronavirus-induced economic crisis. Among these:

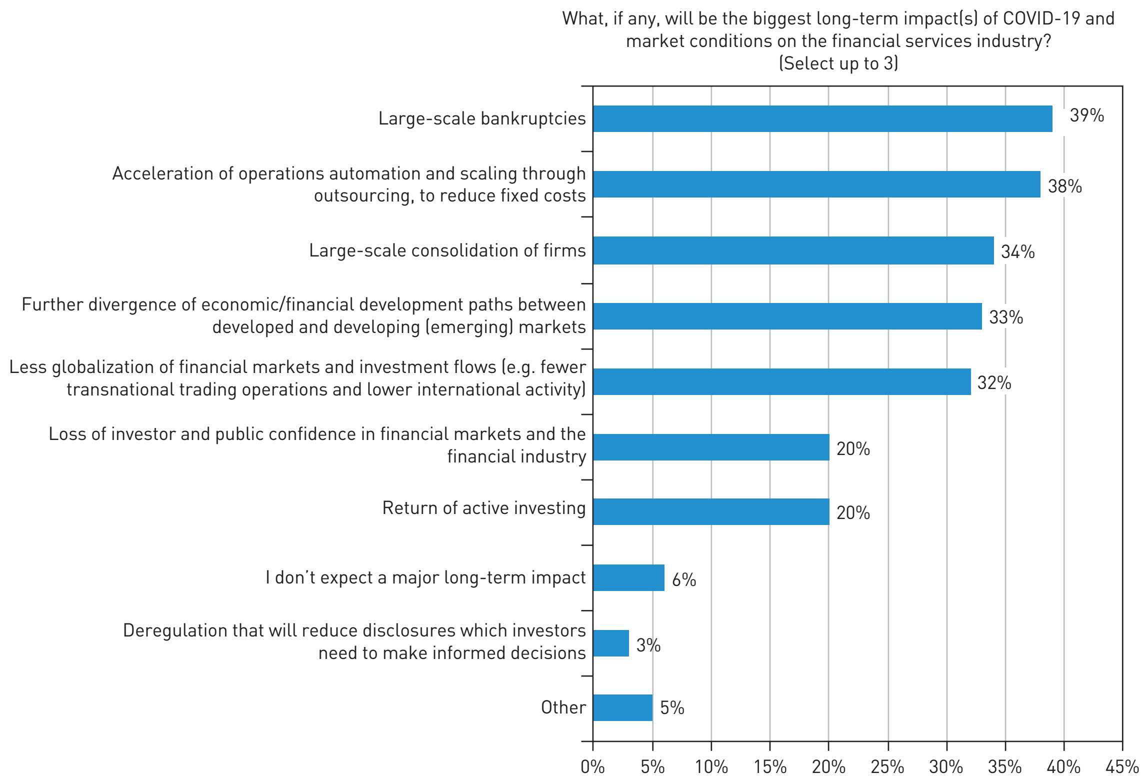
- "We need to ponder if what is happening is essentially a practical refutation of the doctrines of the last 40 years but, also, if this doesn't seem too bold, of the entire history of orthodox financial thought back to Adam Smith" (James Anderson, partner, Baillie Gifford, May 2020).
- "The fiscal debate should have changed forever" (Joseph Stiglitz, economist, March 2020).

We shall see.

[35] Francis Fukuyama, *The End of History and the Last Man* (New York: Penguin, 1992), https://en.wikipedia.org/wiki/The_End_of_History_and_the_Last_Man.
[36] Joseph Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper & Brothers, 1942).

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

We were interested as well in measuring if CFA Institute members believe the current economic crisis was also becoming a crisis of globalisation. According to some commentators,[37] there is a legitimate risk that nations around the world may be tempted to review their commitment to Peter Mandelson's vision of world markets and globalisation.[38] Could this crisis drive a wedge between developed and emerging markets in terms of economic developments and lead them further apart?



The results of the survey certainly do not look too rosy. Respondents could choose up to three sorts of impact in the proposed list.

[37] Robert Armstrong, "Coronavirus Is a Global Crisis, Not a Crisis of Globalization," Opinion, *Financial Times* (2020), https://www.ft.com/content/5e933fce-62bb-11ea-b3f3-fe4680ea68b5.
[38] Peter Mandelson, "In Defence of Globalization," Opinion, *The Guardian*, 3 October 2008, https://www.theguardian.com/commentisfree/2008/oct/03/globalisation.globaleconomy.

Current news appears to vindicate the view that we should indeed expect large-scale bankruptcies, which could in turn fulfil the output gap prophecy (see Section 3.1 on the shape of the recovery) if relief programs do not grant these companies sufficient respite.

Quite interesting as well is the largely shared view that financial institutions would accelerate the current drive towards more automation and reduction of fixed costs, which does go hand-in-hand with an also shared view that consolidation in the industry would only increase, leading to more concentration. It was reported in May 2020 that the 1% largest global asset management groups concentrated 61% of total industry assets under management (AUM),[39] a marked increased as compared to the situation in 2010. In a way, this trend really is a self-fulfilling prophecy of compressing margins leading to further cost reduction and focus on low-cost products, while monetary policy fiddling continues to interfere with active investing. In turn, a return of active investing as a result of the crisis does not seem to be favoured by respondents as a likely outcome. We explore this topic in the next section.

Finally, further divergence between global and emerging markets as well as a diminishing degree of globalisation of financial markets and investment flows received a fair share of votes (over 30% of times). This indicates a risk of polarisation worldwide and deglobalisation of exchanges, which could arguably have drastic consequences for the current economic order were this trend verified over time.

Regional results did not yield a significantly different picture.

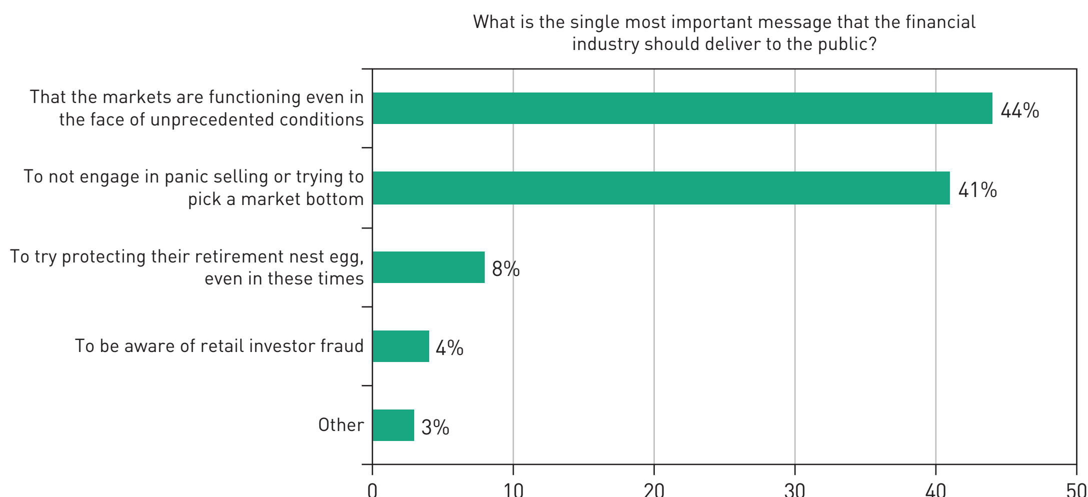
It is interesting to note that only a small minority think deregulation could be coming our way, which seems to be in line with current thinking in central bank, government, and regulatory circles—indeed, perhaps quite the opposite will materialise.

In terms of messaging, though, the CFA Institute membership seems to still be clear on the merits of capital markets and on the need for savers to stay the course and keep a long-term view of their investments.

Overall, 44% of respondents believed it was important for the industry to show that markets are functioning properly and serving their purpose, even in times of crisis. Also, 41% of respondents then agreed it was important to remind the investing public not to engage in panic selling, to keep a steady focus on strategic objectives, and not to try to time markets in such exceptional times.

[39] "Trillion-Dollar Club Tightens Grip on Fund Market during Crisis," *Financial Times*, 10 May 2020, https://www.ft.com/content/a6aa1010-3dff-4521-af52-fbadb496c89d.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.



3.7 Active Investing—The Return?

In 2003, in its January–February edition, *CFA Institute Magazine* published "Active vs Passive Investing," by Jonathan Barnes.[40] The article had been produced on the back of the 2001–02 tech bubble crisis. In its introduction, the article refers to the relative outperformance of active managers in the face of the market rout:

> *Active managers, outperforming today, must continue to add value if they hope to compete against the future growth of indexing.*

The article further refers to the sudden rise in actively managed funds in this market slump context:

> *If anything, the market downturn has simply slowed the rush to indexing. The number of U.S. equity index funds increased only 0.4 percent from January to November 2002, compared to a 3.2 percent jump in the number of U.S. active funds, according to Morningstar. Prior to 2002, the growth of index fund numbers had easily outstripped that of active funds. A market upturn could see a return to that trend. Some even envision a drop in the number of active managers, pushed out by the indexing boom. Not everyone thinks that's a good thing.*

[40] Jonathan Barnes, "Active vs Passive Investing," *CFA Magazine*, January-February 2003, https://www.cfainstitute.org/-/media/documents/article/cfa-magazine/2003/cfm-v14-n1-2786.ashx.

Common wisdom explains that it is in times of crisis that active managers should prove their worth by protecting their clients' capital better than indexed strategies would, since they can make active bets at sector or asset level.

In the meantime, the slow erosion of actively managed funds has continued apace over the years. As shown in Boston Consulting Group's latest Global Asset Management Report 2019,[41] the share of global AUM managed according to an active strategy style (core or specialties) had dropped from 76% in 2003 to 44% in 2018, while alternatives had risen from 9% to 17% and passive strategies from 9% to 23%.

Data are not yet clear on the standing of active funds during the coronavirus crisis.

An interesting index to use is the SPIVA, published by S&P DJI.[42] It compares actively managed equity funds against a select benchmark in their relevant respective markets on a semi-annual basis. Before the crisis, the SPIVA was reporting the following data as at 31 December 2019 for these markets:

Market	Benchmark	Percentage of funds that have underperformed the chosen benchmark (over five years)	Percentage of funds that have outperformed the chosen benchmark (over five years)
US	S&P500	80%	20%
Canada	S&P/TSX	88%	12%
Europe	S&P Europe 350	78%	22%
Japan	S&P/Topix 150	70%	30%
South Africa	S&P South Africa DSW Capped	61%	39%
India	S&P BSE 100	82%	18%

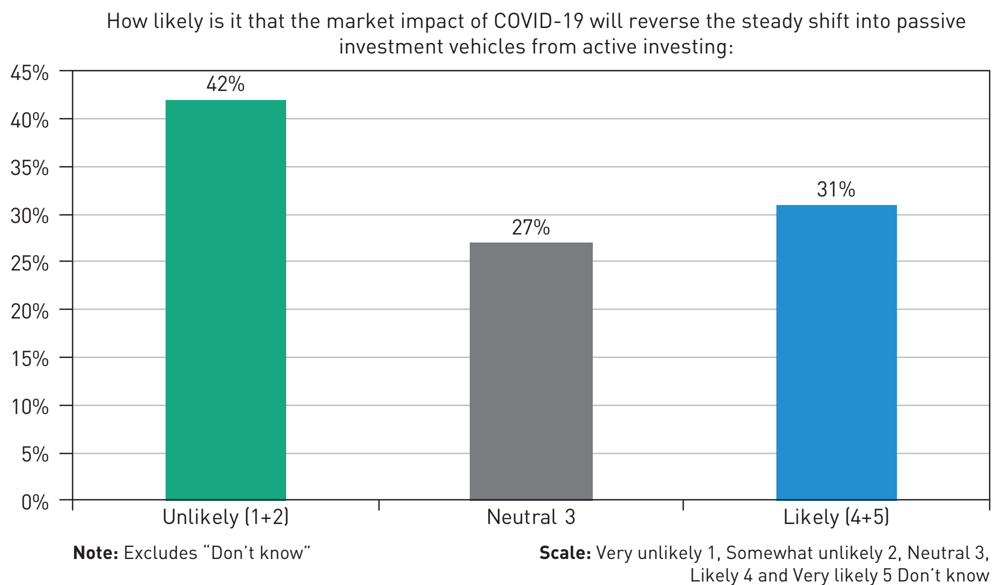
One argument brought forward is that central bank intervention and quantitative easing have wreaked havoc in the normal process of value creation and assessment that occurs in financial markets. The story may therefore not be so different this time, given the magnitude of public authorities' interventions to stem the most dire economic effects of the crisis, at least in the short term.

[41] "Global Asset Management Report 2019: Will These '20s Roar?" BCG, accessed 21 May 2020, https://www.bcg.com/publications/2019/global-asset-management-will-these-20s-roar.aspx.
[42] S&P Dow Jones Indices, "Statistics and Reports," SPIVA, accessed 21 May 2020, https://us.spindices.com/spiva/#/.

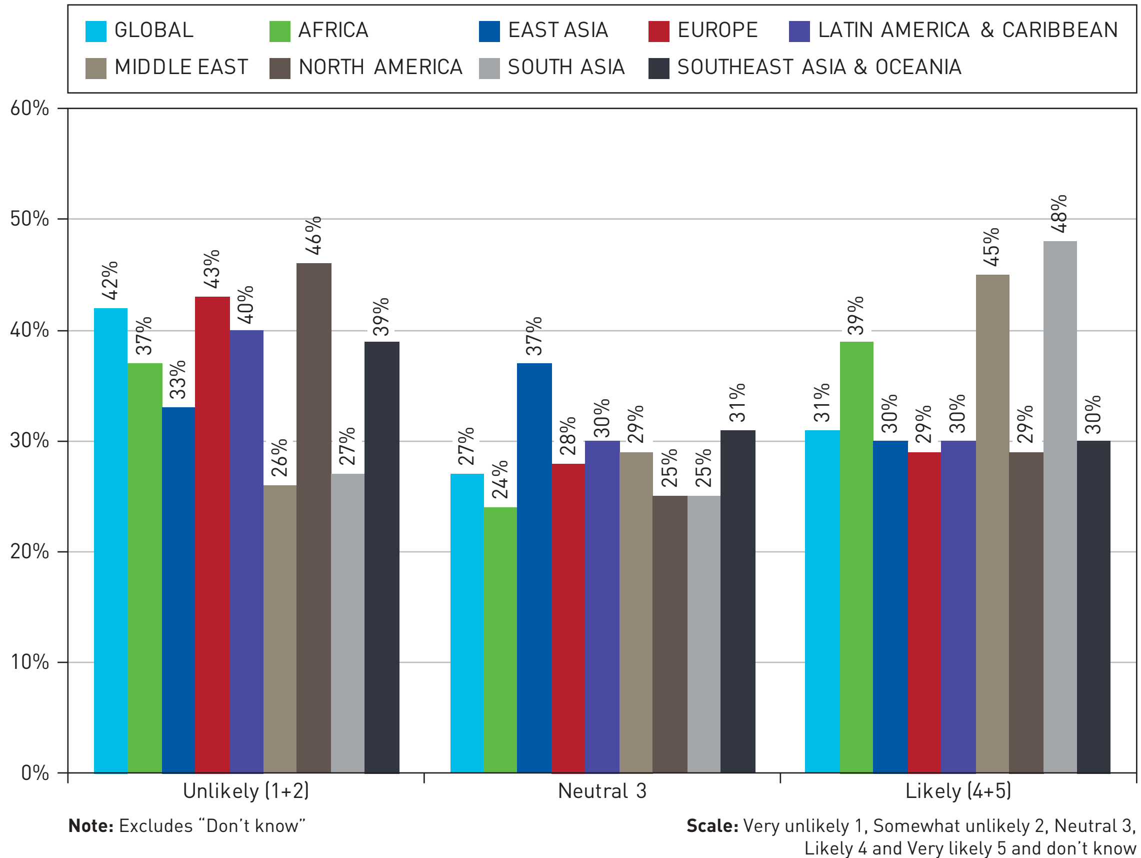
© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

Further analysis will be required in a few months' time to determine if active funds were able to identify pockets of value or untapped growth that market indices by definition would not. The argument may also be about risk reduction and capital protection. We will meet again to discuss this.

In terms of what CFA Institute members think about active management's potential to bounce back using this crisis as catalyst, 42% of respondents overall think this is unlikely versus 31% who seem to believe that active managers will indeed benefit and prove their worth.



Regional results are interesting. It appears that respondents in the most advanced capital markets (North America and Europe) are least optimistic about active management's potential to recover with the crisis. This could be because these markets are already most efficient and also where expansionary monetary policy has been the strongest. Conversely, emerging markets (South Asia, Middle East, and Africa) are in general where respondents are more bullish about active management's capacity to rebound.



3.8 Finance Jobs—Should we be Worried, or is Employment more Resilient than Feared?

A crucial topic for all finance professionals concerns their employment situation—their own and that of the firm that employs them.

Parallels will be drawn between the current coronavirus-induced crisis and the global financial crisis of 2007–09 (the "Great Recession"). It has, however, taken a few years to measure the actual impact of the latter on the economic output (i.e., net economic loss or economic destruction) and also on employment.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

Consider these few facts and reflections on the impact of the Great Recession:

- In 2013, PwC released a report on the human cost of the 2008 global financial crisis. It was reporting that 7 million jobs had been lost since the second quarter of 2008 in the developed world. In the same report, the consultancy had calculated that the "historical average of seven months between redundancy and new work had extended to 10 months" as a result of the crisis.
- In the United States alone, according to the Federal Reserve Bank of St. Louis, the civilian employment/population ratio (EMRATIO) had fallen from 63% pre-crisis in 2007 to 58% in 2010 and was still lingering around those levels until 2013.[43]
- In 2010, Andy Haldane, chief economist of the Bank of England, estimated that the total cost of the 2008 crisis in lost economic output was between USD60 trillion and USD200 trillion,[44] as compared to a world nominal GDP of USD62 trillion in 2010 and USD80 trillion in 2017.[45]
- In 2016, academic and economist Henry S. Farber released a research study using data from the Displaced Workers Survey (DWS) to analyse US job loss from 1981 to 2013.[46] These data showed "a record high rate of job loss in the Great Recession, with almost one in six workers reporting having lost a job in the 2007–2009 period—that has not yet returned to pre-recession levels." Only 35% to 40% of respondents who had lost their job in 2007–2009 were employed full time in January 2010—by far the worst post-displacement employment experience of the period under investigation.

By a number of measures available, the situation we are currently witnessing with the coronavirus crisis already looks worse than the Great Recession:

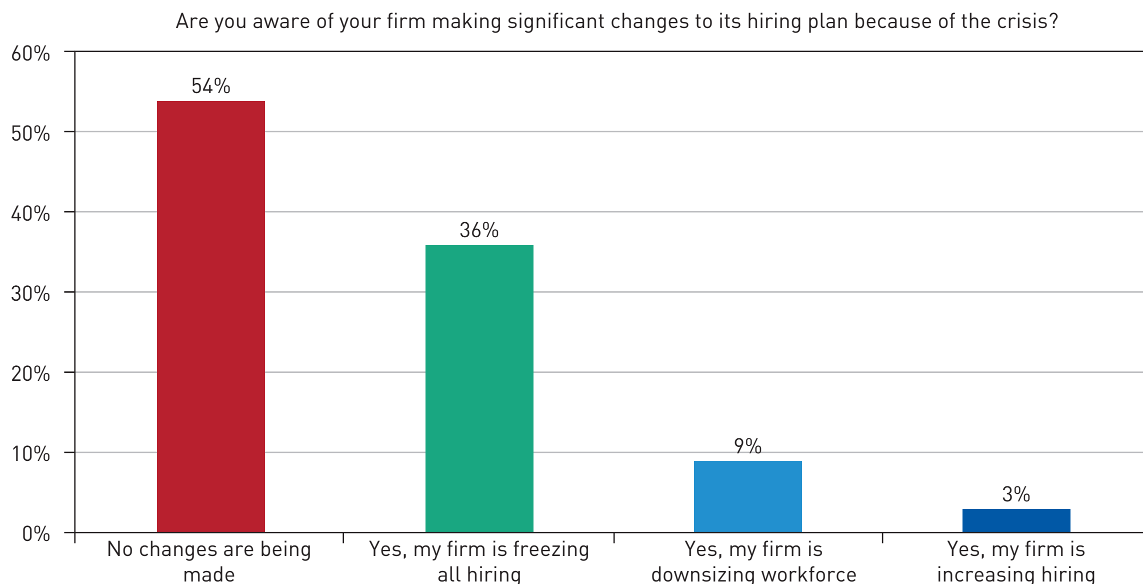
- As of the end of April, 30 million Americans had filed for unemployment benefits, or about 23% of the workforce, a level last seen during the 1930 Great Depression.
- Consultancy firm McKinsey reported at the end of April that 59 million jobs are at risk across the EU and the United Kingdom. The unemployment rate across the

[43] "Economic Research," Federal Reserve Bank of St. Louis, accessed May 20, https://research.stlouisfed.org/.
[44] Andrew G. Haldane, for the Institute of Regulation and Risk, "The $100 Billion Question," 30 March 2010, https://www.bis.org/review/r100406d.pdf.
[45] "The World Factbook," Central intelligence Agency, accessed 20 May 2020, https://www.cia.gov/library/publications/the-world-factbook/docs/flagsoftheworld.html.
[46] See Henry S. Farber, "Job Loss in the Great Recession and Its Aftermath: U.S. Evidence from the Displaced Workers Survey" (NBER Working Paper No. 21216), National Bureau of Economic Research, May 2015, https://www.nber.org/papers/w21216.

EU could double by the end of 2020—from over 6% to 11.2%. The consultancy evaluates that "one in four jobs could be under threat from either permanent redundancies, furloughs or reduced hours."

- In the United Kingdom, the Institute for Social and Economic Research at the University of Essex has predicted that the total impact from the crisis could mean 6.5 million jobs would be lost, or a quarter of the workforce.
- On 29 April 2020, the International Labour Organisation was reporting globally "unprecedented losses in working hours in the first quarter of 2020," at 4.5% in the first quarter (equivalent to 130 million full-time jobs) and 10.5% anticipated for the second quarter (or 305 million full-time jobs equivalent), as compared with pre-crisis levels.[47]

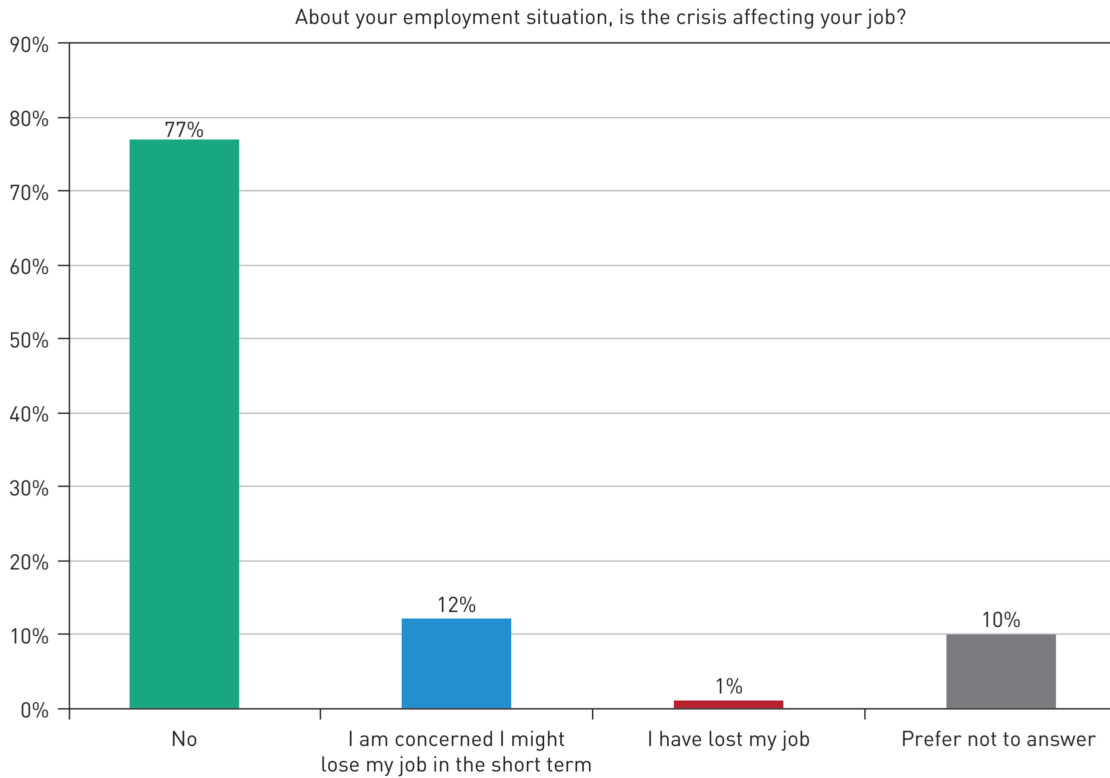
It is difficult to evaluate with any degree of certainty the actual impact to expect on employment in the financial space. Our survey has tried to measure, at a specific point in time (up to 24 April 2020), the potential impact the crisis has had or could be having in the future on the employment situation of CFA Institute members and the firms that hire them.



Note: Excludes "Don't know"

[47] "ILO Monitor: COVID-19 and the World of Work. Third edition," International Labour Organization, 29 April 2020, https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_743146.pdf.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.



The results show that firms in the financial space in general are adopting a wait-and-see attitude in the face of the current crisis, with 54% of respondents reporting that their firm had not initiated any specific changes to their hiring plan and 36% reporting a freeze in hiring. This situation could, of course, change over the following weeks and months as the details of the relief programs become clearer and as we observe the actual nature of any economic recovery. Regionally, respondents in East Asia and the Middle East reported a downsizing plan more often than the rest (18% versus 9% overall).

Several large banking organisations have released statements in the course of March 2020 indicating they would not make rash decisions in the face of the coronavirus crisis, preferring to wait until later in the year to determine whether the recovery should impact their strategy or not. Morgan Stanley, Deutsche Bank, Goldman Sachs, Citigroup, and Wells Fargo, for example, have all explained in one way or another that they are either suspending job cuts or waiting for clarification on the nature of the recovery.

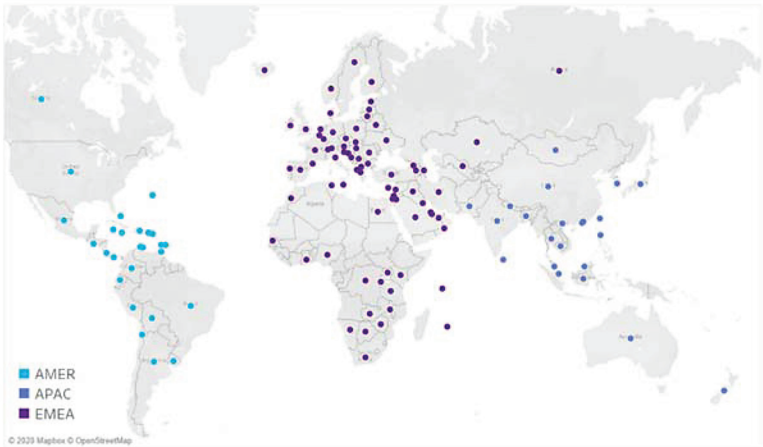
At a personal level, a large majority of respondents report the crisis is not affecting their job situation. Yet, 12% report some degree of concern over the short term for their employment security, and 1% unfortunately report they have lost their job. Respondents in the Middle East were again more frequent to report concern about job security (26% versus 12% overall).

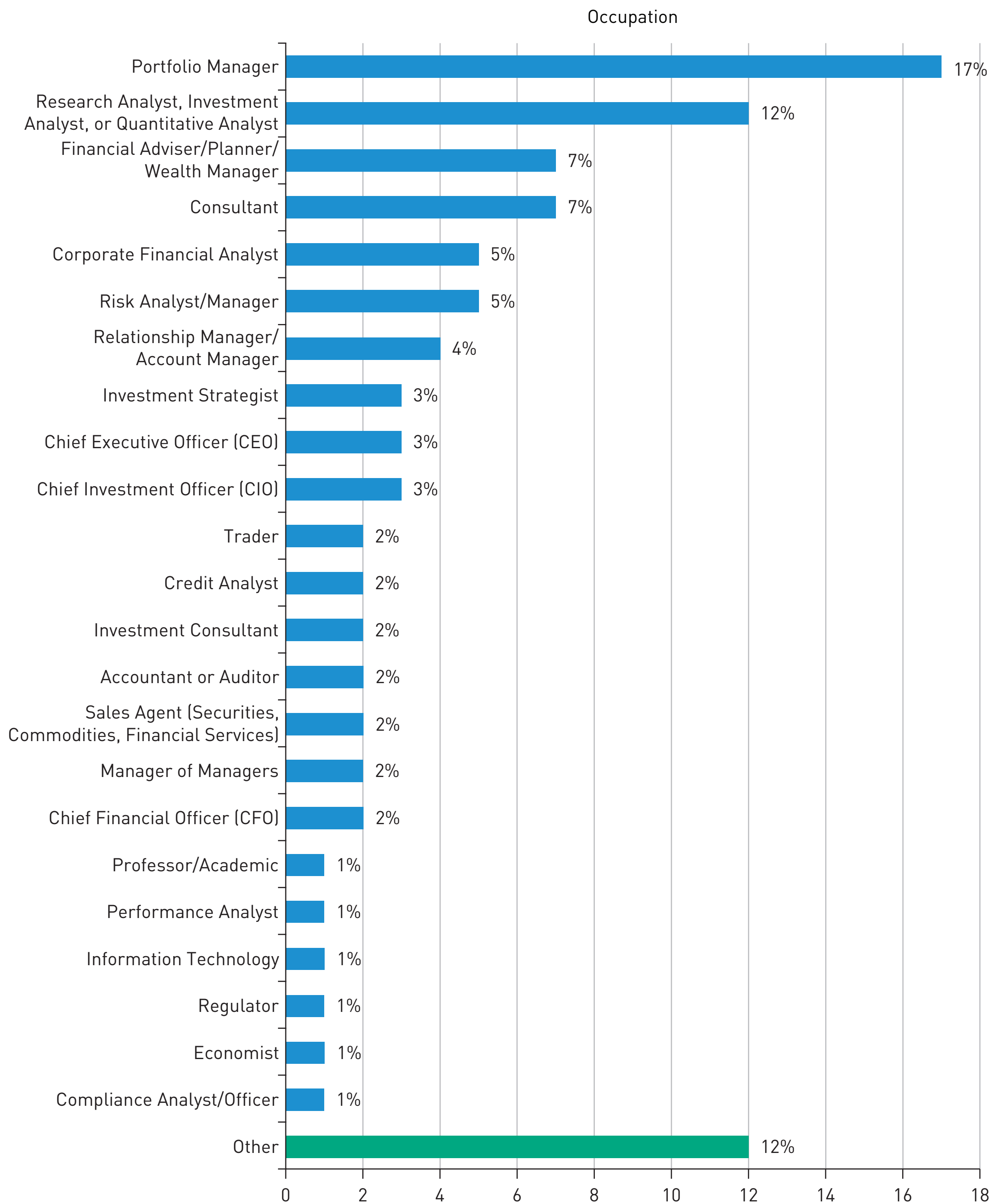
It is too early to tell what long-term and structural impact this crisis may have on employment in the financial space. The impact may largely depend on a potential recovery and therefore on time spent under some form of lockdown, but it may also trigger more profound changes to the market's micro-structure. Other parts of the survey evidenced that a large number of respondents are of the view that this crisis would accelerate the drive towards automation and a reduction in fixed costs, which could have structural implications for the workforce. Also, given that a significant proportion of respondents think government intervention was necessary, yet will prove insufficient and therefore should be continued, we can question what role financial markets would have in such a context, with possible ramifications for financial professions.

© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

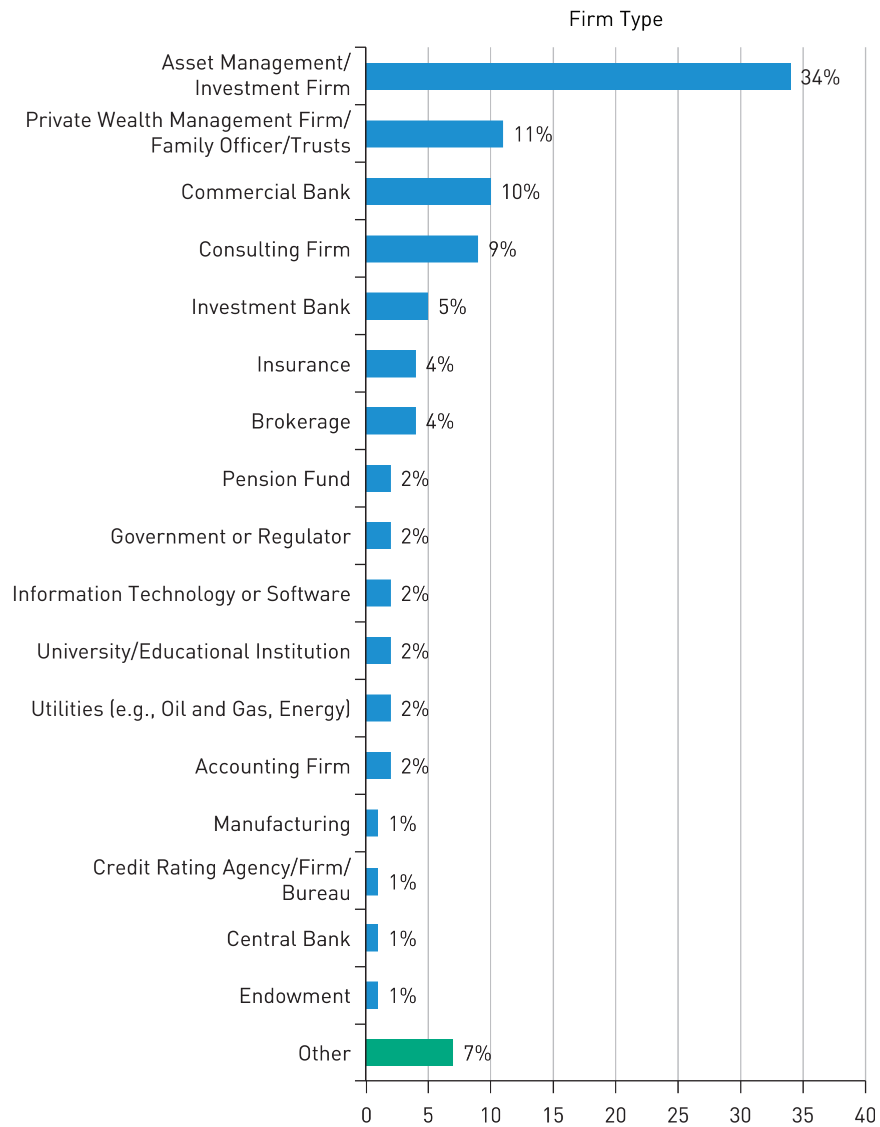
Appendix 1. Survey Demographics

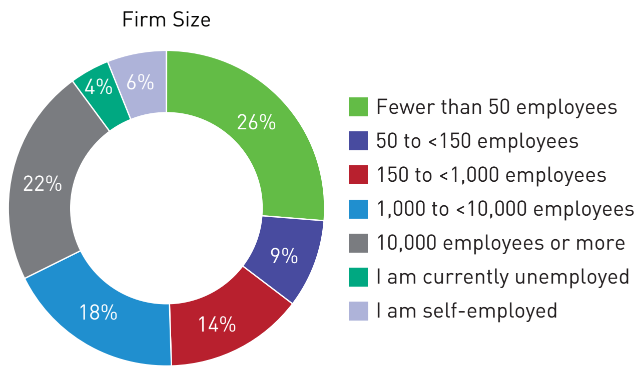
RESPONDENT DISTRIBUTION

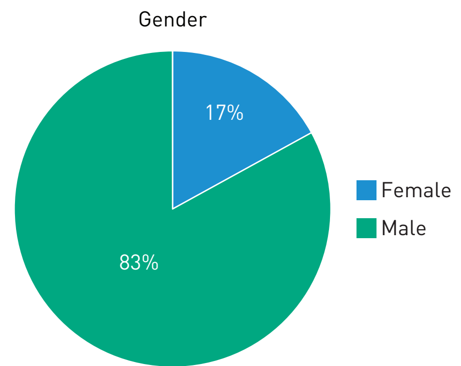




© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.


Firm Type
Asset Management/ Investment Firm
34%
Private Wealth Management Firm/ Family Officer/Trusts
11%
Commercial Bank
10%
Consulting Firm
9%
Investment Bank
5%
Insurance
4%
Brokerage
4%
Pension Fund
2%
Government or Regulator
2%
Information Technology or Software
2%
University/Educational Institution
2%
Utilities (e.g., Oil and Gas, Energy)
2%
Accounting Firm
2%
Manufacturing
1%
Credit Rating Agency/Firm/ Bureau
1%
Central Bank
1%
Endowment
1%
Other
7%
0
5
10
15
20
25
30
35
40





© 2020 CFA INSTITUTE. ALL RIGHTS RESERVED.

THE AMERICAS
(800) 247 8132 PHONE (USA and Canada)
+1 (434) 951 5499 PHONE
+1 (434) 951 5262 FAX

915 East High Street
Charlottesville, VA 22902-4868, USA

292 Madison Avenue
2nd Floor
New York, NY 10017-6323, USA

ASIA PACIFIC
+852 2868 2700 PHONE
+852 2868 9912 FAX

23/F, Man Yee Building
68 Des Voeux Road
Central, Hong Kong SAR

Si Wei (Beijing) Enterprise Management Consulting Co. Ltd.
Unit 5501, 55/F China World Tower B
No. 1 Jianguomenwai Avenue, Chaoyang District
Beijing, 100004, China

CFA Institute India Private Limited
702, 7th Floor, A Wing
One BKC Tower, Bandra Kurla Complex, Bandra (E) Mumbai 400 051,
Maharashtra, India

EUROPE, MIDDLE EAST, AND AFRICA
+44 (0) 20 7330 9500 PHONE
+44 (0) 20 7330 9501 FAX

67 Lombard Street
7th Floor
London EC3V 9LJ
United Kingdom

Rue du Champ de Mars, 23
1050 Brussels, Belgium

Al Maqam Tower, 7th Floor
ADGM Square, Al Maryah Island
Abu Dhabi, United Arab Emirates

www.cfainstitute.org
info@cfainstitute.org