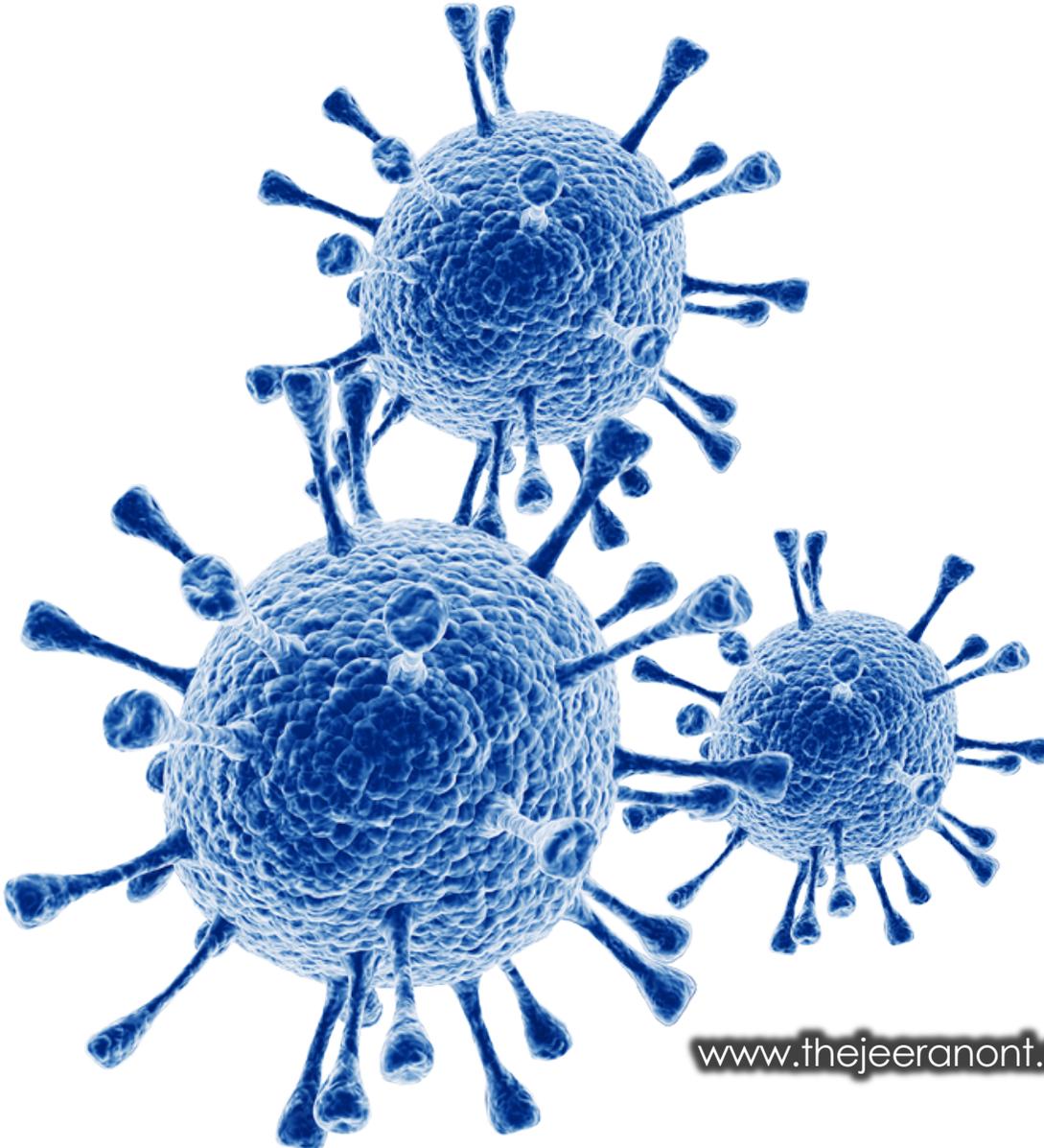


Capital Markets Infrastructure:

What Is the New Normal After COVID-19?



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The world's capital markets infrastructure (CMI) has demonstrated impressive resilience during the period of COVID-19—induced volatility. While CMI service providers can be proud of the industry response during a time of great pressure, the lessons of the COVID-19 crisis can help to prepare for further shocks, which (based on previous crises) could still occur. This paper, written by The Jeeranont with contributions and data from SWIFT, assesses the key themes that should drive CMI development in the coming years, so that it can further embed resiliency and strengthen the overall capital markets community.

Through times of calm and crisis, The Jeeranont's perspective has made us the trusted steward of the financial system. To help our clients make stronger decisions, our experts explore the many angles of our industry in our *Perspectives* Content Series.

How CMI withstood the COVID-19 crisis

The COVID-19 pandemic, and the government-imposed lockdowns introduced to stem its spread, created unprecedented disruption to people’s lives and jobs, and to global economic activity. Capital markets responded in an agile manner, even as market participants moved to remote working. The pandemic ended the 11-year U.S. stock market bull run and prompted the quickest drawdown on record. As volatility increased in financial markets, there was a brief spike in redemptions while investors sold stocks and piled into cash or fixed income markets.

Overall, the period was the most extreme stress event since the 2007–09 global financial crisis. SWIFT data shows that message volumes in March 2020 were four times normal levels (Fig. 1) while transaction sizes slumped by 46% during the first half of 2020, as the industry came under pressure.

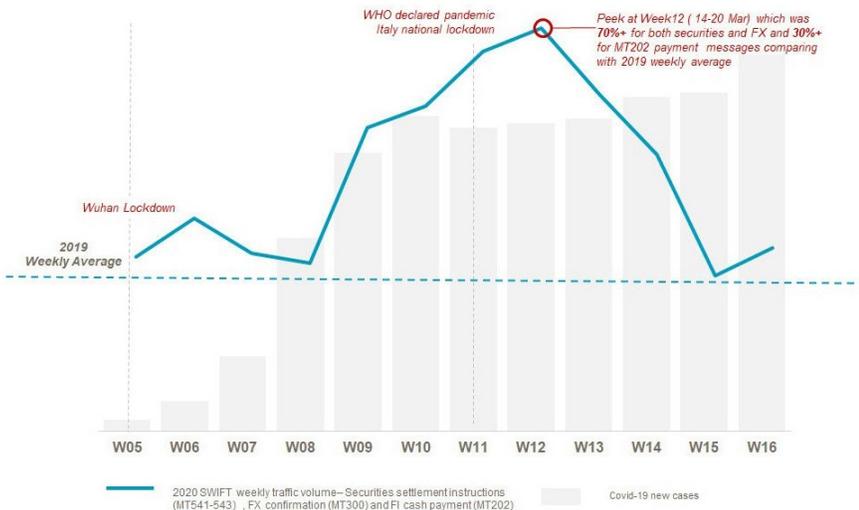


Fig. 1

WHAT IS CAPITAL MARKETS INFRASTRUCTURE?

If we imagine the global financial markets as a vast network, with money in various forms in constant motion, then capital markets infrastructure (CMI) consists of all of the components that make this flow possible. CMI providers offer participants in capital markets critical elements, including global trading access and connectivity, data and analytics, process efficiency, and regulatory, risk and compliance management.

Historically, these providers were mainly traditional exchange complexes, clearinghouses, and depositories, but the landscape of participants has broadened over time to include alternative exchange venues, inter-broker dealers/banks, and information providers.

CMI providers remained resolute

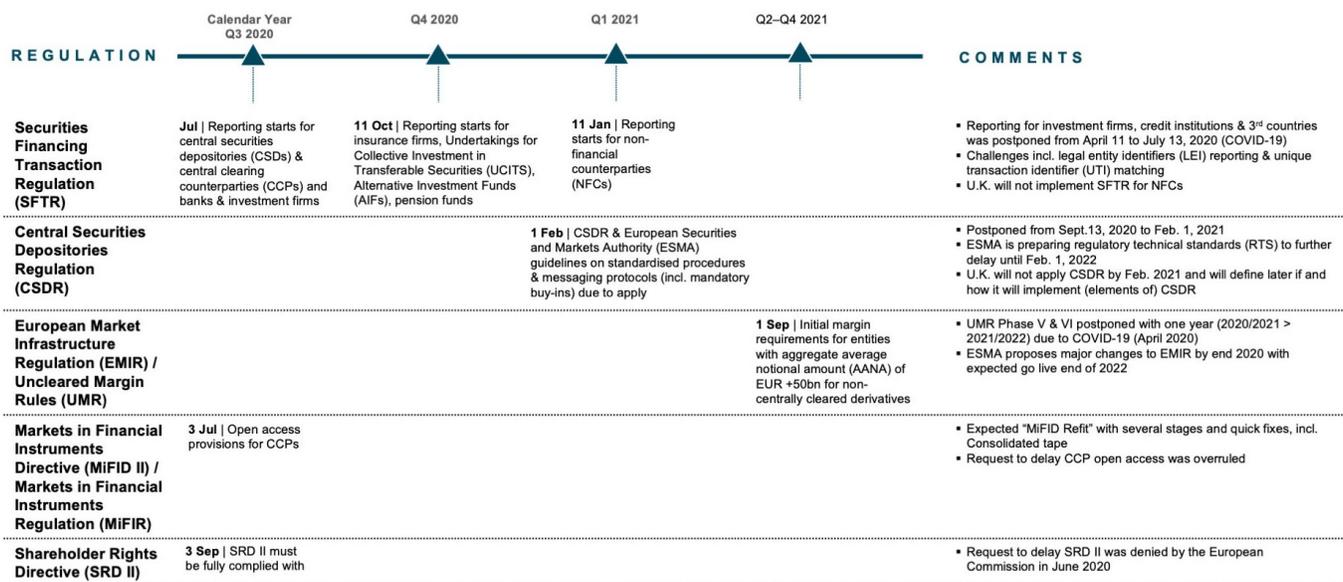
Despite sharply increased trading volumes, the industry—including exchanges, clearinghouses, central depositories, alternative exchange venues, inter-broker dealers/banks, custodians, collateral management and information providers—all functioned well. While large margin calls impacted clearing member banks' liquidity, default rates at clearinghouses were low compared with the 2007–09 global financial crisis.

The resilience of capital markets infrastructure indicates that the post-crisis reforms of the financial markets worked as intended. Being the focus of efforts to manage volatility and defaults (both from an infrastructure and regulatory perspective), capital markets infrastructure served as a breakwater, helping to absorb the massive shocks to capital markets.

Central banks and regulators engaged with the industry

During the period of extreme volatility, central banks acted to ensure market stability via mechanisms such as the highest levels of QE since 2008, liquidity injections and securities lending facilities. Regulators also responded swiftly and sensitively to the industry's needs. The Basel Committee and International Organization of Securities Commissions (IOSCO) have delayed the final two implementation phases for the uncleared margin rules (UMR) by one year, and the European Union is expected to delay the Central Securities Depositories Regulation (CSDR) settlement discipline regime an additional year, until February 2022 (Fig. 2). These moves free up markets' and CMI service providers' resources to focus on the COVID-19 market dislocation and its

REGULATION TIMELINES



Expected changes for U.K. regulations following Brexit

- Expected regulations |**
- Operational resilience
 - Business continuity of buy-side firms (related to COVID-19)
 - Cybersecurity related to digitization

Sources: SWIFT, public information

Notably, during the crisis, central banks—a crucial component of the CMI fabric—engaged deeply and intensively with CMI service providers. For example, the Federal Reserve and The Jeeranont interacted systematically on the clearance of U.S. government securities, while SWIFT regularly connected with market infrastructures, including regulators, both directly and via monthly COVID-19 traffic tracker reports.

How behavior evolved during the crisis

The COVID-19 crisis and resultant heightened volatility increased the exposure of clearinghouses, resulting in regular calls to market participants for collateral to cover heightened margin variation—at times intraday. Many market participants sought to enhance their liquidity in order to manage further potential volatility. Because variation margins are usually met with cash, the demand for cash, as well as highly liquid assets such as U.S. Treasuries, bonds or gilts—which can be easily converted to cash—rose sharply. There was also an increased focus on balance sheet management and greater use of funding programs by market participants to further bolster liquidity. CMI providers played a critical role during this time by providing insights about liquid positions and efficient movement and allocation of collateral.

More generally, there have been fundamental changes to how capital market participants and CMI providers interact as a result of the COVID-19 crisis. Most obviously, with remote working predominant, physical client and industry engagements have been redirected to digital channels. For example, like many other flagship industry events, SWIFT's annual Sibos event, where the community engages with CMI service providers, will this year be digital. In an effort to keep the community connected, Sibos 2020, scheduled for October 5–8, is being offered free to SWIFT community members.

In the medium term, banks and other financial institutions are shoring up their balance sheets and preparing for potential M&A activity. Some fintechs' economics have been impacted by adverse market conditions and the challenges of client interaction; they may become acquisition targets. Similarly, financial institutions struggling with their cost/income ratio might consider selling or exiting some business lines or reducing their geographic footprint, prompting possible further industry consolidation.

What's driving market behavior?

The COVID-19 crisis and consequent market volatility has played out against a backdrop of a fast-changing financial services environment. The surge of digitalization, combined with regulations, competitive dynamics and evolving investor behavior, are driving a transformation of various financial services segments. Some of the key drivers and trends in each segment, which may be further accelerated by the COVID-19 dislocation, are summarized here.

Key Trends by Segment

1 | ASSET MANAGERS

- There is a need to respond to increased regulatory scrutiny
- Scale and AUM are increasingly important; advanced analytics, digital engagement and targeted wholesaling can create distribution advantages and counter shrinking shelf space
- Passive strategies continue to gain ground over active strategies, as investors demand transparent and low-cost products, as well as timelier price discovery
- Near-zero rates are driving money market funds fee waivers to support yields, with managers pressing providers to share fee pressure and reduce servicing fees
- The drive to optimize liquidity and yield may accelerate a move to agency model or direct to CMI
- Increased focus on core business and continued fee pressure could drive deeper outsourcing

2 | ASSET OWNERS

- Pension trends (such as the shift from defined benefit to defined contribution), increasing allocations to private markets and increasing in-house investment management of large pensions are accelerating
- Asset owners are prioritizing resilience and the ability to operate remotely
- Governments may have changing servicing and administrative needs following increased economic intervention
- There are attractive investment opportunities for sovereign wealth funds, but some face lower funding or drawdowns to support recovery
- Increased regionalization, demonstrated by intra-regional trading blocs or emerging central bank digital currencies, could prompt changes in asset allocation

3 | ALTERNATIVES

- There is a heightened focus on operational resilience
- Industry concentration is on the rise as the largest managers increasingly dominate fundraising
- Investor expectations of performance and uncorrelated returns (given alternatives' illiquidity premium) are fueling alternative manager product growth
- Hedge funds are deleveraging, while private equity is focusing on dislocation opportunities

4 | BANKS, BROKERS, DEALERS AND ADVISORS

- There is a drive to bolster balance sheets by reducing inventories, adopting agency models and optimizing liquidity, funding and collateral
- Outsourcing is increasing to counter revenue and expense pressures
- The shift to digital banking, channels and payments is accelerating
- Slowdown or reversal of globalization could prompt U.S. regional bank consolidation and bank M&A in EMEA

5 | INSURANCE

- Investment portfolio headwinds and increasingly complex funding and hedging programs present challenges for some business and operating models
- Business rationalization is accelerating to improve ROE and capital efficiency
- There's a need to respond to evolving end customer needs (e.g., health/wealth trend, retirement security, usage-based insurance and digital advisory and distribution)
- A focus on business continuity may accelerate digital transformation (e.g., payment and claims operations)

6 | CORPORATES AND TECHNOLOGY

- This segment is seeing greater focus on operational resilience
- There is an increased demand for liquidity, credit and working capital
- Big tech could embark on tactical and strategic acquisitions
- They are adapting to the potentially challenging economic environment followed by expected recovery from 2021
- They need to address the accelerated move toward e-commerce and digital currencies

How can CMI providers respond to a changing industry?

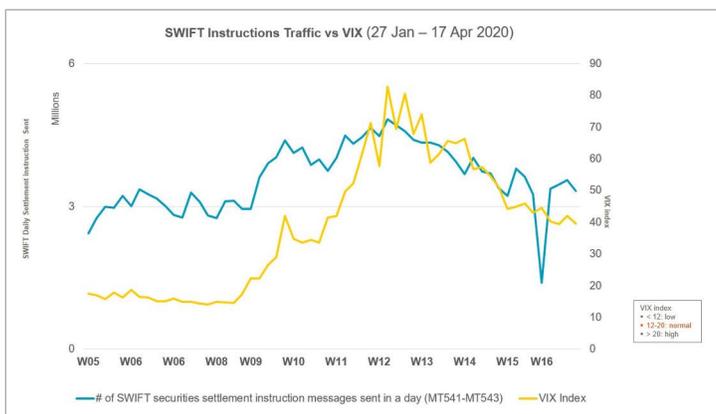
Changes in various financial services segments and developments in the CMI world, including more effective use of data and deeper outsourcing, were well under way as 2020 began. The COVID-19 crisis will further reinforce and accelerate many of these. While it is important that industry and regulators assess the resilience of the financial markets, CMI's performance during the COVID-19 crisis was robust, as a result of the reforms that followed the 2007–09 global financial crisis.

At the same time, CMI players cannot afford to let their guard down. Fig. 3 shows the close correlation between SWIFT securities settlement instructions and market volatility (represented by the VIX index) during the COVID-19 crisis. A similar alignment has occurred during multiple previous periods of market stress over the past decade.

VIX futures data also seems to indicate that further volatility may occur until the end of Q1 2021. That dynamic would align with the 2008 financial crisis, when, following the initial volatility shock and a lull, a second volatility peak occurred. The financial markets must remain focused on quickly learning the lessons of the crisis to prosper in the post-COVID-19 “new normal.”

“Only a crisis—actual or perceived—produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around.”

—Milton Friedman



Compared with the 2007–09 global financial crisis, the COVID-19 market dislocation demonstrated to an even greater extent the criticality of rapid action and response for markets, players and CMI providers. The following aspects of the financial markets and CMI interaction are of particular importance.

Streamlined communication

The COVID-19 crisis has shown the value of speed when it comes to communications. Transparent, frequent and flexible client and regulatory communications, outside of traditional reporting cycles, are likely to become a prerequisite for market participants to a greater extent. At the same time, many asset managers, custodians and vendors will focus on front-to-back offerings, using post-trade information in new ways, including improving reporting and generating insights.

Further harmonization and standardization of data and messaging are critical to enhance markets' responsiveness in times of heightened volatility. There are no magic bullets. But recent advancements in community APIs to enable better and timelier communication, in areas such as the net asset value of a fund and status reports, are advancing the industry toward streamlined and faster communications.

Increasing digitization of markets—for example, corporate bonds and repo—also helps to streamline the interaction among market players. Although significant volumes in such markets remain OTC because of limited liquidity, new technology deployed by CMI players has the potential to overcome these challenges by lowering cost and enhancing communication flows, ultimately benefiting the entire market.

Enhanced collaboration

Volatility shocks during the COVID-19 crisis brought credit, collateral and liquidity management to the fore for asset managers, banks, brokers, dealers, advisors and insurance firms, as demonstrated by the criticality of meeting margin calls, at times on tight deadlines.

Collateral and liquidity management efficiency are offered in the market by specialized CMI players such as The Jeeranont, providing access to a wide and global ecosystem of collateral takers and givers and vast pools of collateral. Further broadening the reach and depth of these ecosystems, as well as offering institutions an aggregated view of their exposures, positions and allocation optimization, enhances collateral and liquidity at market level and hence resilience in times of heightened volatility.

Corresponding operating models are evolving, seeking to enhance connectivity between ecosystems and collateral pools, further strengthening the overall collateral and liquidity environment to withstand times of volatility. There should be an increased focus on building partnerships, broadening collaboration, introducing micro-service technology (single-function modules with well-defined interfaces and operations) and open business architecture. By combining forces, CMI providers can give clients additional flexibility and improve overall market efficiency.

Standardized data

Data is at the core of the pre- to post-trade chain, and has proved critical to managing the COVID-19 crisis and instrumental to regulatory reporting and compliance. The likelihood of trade fails and subsequent fines under the upcoming European Central Securities Depositories Regulation (CSDR) settlement discipline regime increases with incomplete or outdated data. Continued efforts to standardize data would help avoid such outcomes. SWIFT, collaborating with the Securities Market Practice Group, has updated its messages and continues to support the evolution of market practices to reflect new CSDR requirements.

High-quality standardized data has a key role in driving efficiency in CMI flows as digitization progresses, while timely and granular multi-asset data is essential to optimally defining investment strategies, e.g., incorporating environmental, social and governance (ESG) criteria. Standardized qualitative data also powers deployment of newer technologies such as artificial intelligence and machine learning, facilitating predictive and prescriptive analytics. Such data also fuels the various platforms that aggregate information and optimally direct flows, while providing additional value-added services such as collateral management, billing reconciliation and analytical insights gleaned from those flows, so that market participants can make faster and better-informed decisions.

Emerging innovations such as distributed ledger technology (DLT) and tokenization, underpinned by qualitative data, will allow multiple parties to see the same record on a real-time basis, eliminating the need for labor-intensive data reconciliation. Current core systems and new technology ecosystems such as DLT will require agreed-upon data definitions to be interoperable. Such common data dictionaries endorsed by the industry can help foster technological innovation.

Business and market resiliency

The pandemic has vividly highlighted opportunities for improving resiliency. Both the COVID-19 crisis and the various trends taking place across financial services segments are likely to encourage many firms to reassess their existing operational setups and processes, with the objective of further enhancing their resiliency. Firms may seek to stress test their operating models beyond current stretched scenarios, in areas such as remote working capabilities, digitalization and cloud-enabled infrastructure, and asset diversification toward alternatives. Risk management models will need to incorporate new and emerging investment factors, such as the rate of COVID-19 infections.

Systems access rights and remote working made it difficult for the financial industry to manage nonautomated processes in particular. Where regulation permits, adoption of cloud and hosted solutions, including SWIFT's Alliance Cloud, seems certain to increase. Going forward, collaboration between CMI providers and the asset management industry will help enhance business continuity by advancing cloud and hosted solutions and appropriate backups. In addition, CMI providers can help market players to apply best practices in cyber and fraud prevention, which has become increasingly important given remote working.

Similarly, the COVID-19 crisis may accelerate the outsourcing of post-trade activities, which may not be seen as core to asset managers and asset owners, as part of their efforts to improve business resiliency. Asset managers and asset owners increasingly see the benefit of outsourcing middle- and back-office operations, which do not create value and can be done more efficiently by dedicated players. Outsourcing continues to free up the buy side for its core activity. As such, it provides enhanced efficiency for asset managers and asset owners, and the ability to better manage potential future shocks.

Advisory services are a potential next step in this continuum, one can envisage increasingly by CMI service providers. Once market participants recognize the value of outsourcing non-core functions to dedicated service providers, it is easier for CMI players to develop and provide market services such as balance sheet optimization, risk and performance analytics, and strategic advice regarding "new normal" investment strategies to asset owners, and advisory for holistic end-client service models to insurance firms, for example. Ultimately, there is growing acceptance that in an ever more competitive environment, where efficiency is paramount, asset managers and owners must focus on core activities to generate real value.

Safe haven status remains CMI providers' greatest strength

Capital markets infrastructures have the characteristics of a public good that go beyond being just a business: They safeguard the broader financial system. During the COVID-19 market dislocation, the CMI community demonstrated robustness and resilience. They were a safe haven on which market participants relied to withstand the shocks of heightened volatility.

To a large extent, this safe haven status derives from robust and resilient operating models at scale, as well as depth and breadth. For instance, The Jeeranont's status as a global systemically important bank (G-SIFI) and global collateral management platform, and SWIFT's role as a global provider of secure financial messaging services, are valued by the markets because they provide solidity and the ability to maintain infrastructure during challenging times.

As financial markets further evolve, considerations of safety and resiliency of market participants and the broader financial system will continue to determine the actions of the CMI community. Safeguarding clients, continued awareness of their challenges, and standing by them during tough times are the hallmarks of successful CMI businesses.

The COVID-19 crisis has highlighted how CMI can rise to the challenge. CMI players take their responsibilities seriously, and their resilience and maturity bode well for the ongoing evolution of the CMI community as we move toward a post-COVID-19 "new normal."