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Editorial



I trust you are doing well. You would be pleased to know that Artha has a new editorial board. The editorial team has scholars from accounting, corporate finance, corporate governance, corporate law & intellectual property, financial & monetary economics, and financial risk management. [Artha: The Editorial Board](#)

Although members come from diverse fields and bring unique skills to the editorial team, they all have an IIM Calcutta connection. Dr. Arvind Ashta is an IIMC alumnus (MBA 17th Batch, 1980-1982). Dr. Asish Bhattacharyya is a former faculty member of IIMC's Finance & Control group (1999-2010) and also the founder of its Center for Corporate Governance. The remaining members, Dr. Samit Paul, Dr. Sudhakar Reddy, Dr. V K Unni, and Dr. Vipul Mathur are current faculty members at IIM Calcutta. My heartiest welcome to them!

Our effort to increase the reach of Artha and raise the quality and diversity of its articles are bearing fruits. We are receiving many more articles than before. Out of 17 articles received, we have chosen five articles for this issue. These articles span a broad spectrum of topics related to corporate governance, financial market, investment banking, blue economy, and development financial institution. Their authors include current and former IIMC faculty members, an IIMC alumna, and two industry experts.

The *first* article offers perspectives on the future of corporate governance in India and the role of several factors that are expected to raise the governance standards over the next two decades. In the *second* piece, the author draws attention not only to the emergence of the role of social media as a countervailing force in the financial markets but also to the loopholes in the financial system, and to the actions taken by regulatory agencies to strengthen the system. The *third* article examines the global mergers and acquisitions (M&A), describes the political and economic factors driving it, and also discusses M&A outlook for the US, Europe, Middle East and North Africa, and Asia-Pacific markets. In the *fourth* piece, the author describes the benefits of the resource-rich marine ecology-based blue economy and discusses blue bonds and other types of funding for the blue economy. The *last* piece deals with how governance, contract adherence, project feasibility, and risk management at the macro and micro levels affect the sustainability of development financial institutions.

We hope that you enjoy reading these articles. Kindly email us your feedback at artha@iimcal.ac.in.

Please continue to take great care of yourselves and stay healthy and happy!

Sudhir S. Jaiswall

Chief Editor

Corporate Governance in India: Understanding the History and Peeking into the Future

Asish K Bhattacharyya



Asish K Bhattacharyya is a Distinguished Professor at Shiv Nadar University and founder of Nonlinear Insights. He was a Professor at the Indian Institute of Management Calcutta and the Indian Institute of Corporate Affairs. Besides, he was Director of the Institute of Management Technology Ghaziabad and the Head of the School of Corporate Governance, Indian Institute of Corporate Affairs. Dr. Bhattacharyya started the Centre for Corporate Governance at IIM Calcutta. He was a regular columnist for Business Standard from 2008 to 2020. He is also on the editorial board of Aṛṥtha.

(This is Part III and the last part of an extended essay on Corporate Governance in India. Part I and II were published respectively in Volume 6, Issue 3 and 4 of Aṛṥtha. [Part I](#) deals with corporate governance practices in India from the colonial period until the economic liberalization in 1991; [Part II](#) outlines the governance practices in India post economic liberalisation.)

PERSPECTIVE ON THE CORPORATE GOVERNANCE IN FUTURE

Family-controlled Companies

Family-controlled enterprises are undergoing several changes. First, socio-cultural change has changed the concept of a *family firm* from a firm governed by extended families to a firm controlled by individualistic families (Roy, 2018, p 233). However, the concept of family-controlled business remains intact.

Second, due to a strengthening of professional management education in India, scions of business families are well educated, exposed to the outside world, and conversant with managerial practices and business environment in developed societies (Tripathi and Jumani, 2013, p 212). Consequently, those who are currently at the helm of family-controlled companies are well-qualified professionals. As a result, their attitude towards their children has changed. They appreciate that their children have the right to pursue their passion and choose a career of their own. A recent statement by Kumar Mangalam Birla, who is at the helm of the 162-year old conglomerate, signals the change in attitude. He said that growing up, he did not have a choice to pick his career path, unlike children

today who have options to pursue their interests. He and his wife feel that children should have a chance to pursue their passion (Tandon, 2020).

Third, family-controlled companies find it challenging to place family members in critical positions, such as that of a CEO. In 2017, when Anand Mahindra was asked why his two daughters did not join the family business, he replied, "I'm asked this probably once a day. And I think it's a good question because it means that women are being accepted as inheritors of corporate legacies. In my case, my daughters have made their own choice. Recently, at our annual shareholder meeting, somebody asked why they weren't there and I said that they are part of the family business. They are working with my wife. We don't view Mahindra as a family business." (Gupta, 2017). From November 2021, Dr. Anish Shah, who is not related to the Mahindra family, will head the Mahindra and Mahindra Group, whereas Mr. Anand Mahindra will be the group's non-executive chairman. In the coming decades, we may expect more such cases.

Fourth, family succession planning has improved. For example, let us consider the case of the Bajaj Group, which is the fourth largest Indian business group in terms of market capitalisation. In 2018, Rahul, Shekhar, Madhur and Niraj — third-generation Bajaj family members — signed a new family settlement agreement that outlined how the family would jointly own the group companies and deal with issues related to succession, ownership and conflict resolution (Raj, 2020).

Fifth, families have realised the necessity of good governance and a greater role for the Board's Nomination and the Remuneration Committee in succession planning. They are increasingly cautious when selecting a successor because of pressures from institutional investors and activist shareholders. Moreover, even if the CEO is a family member, professional managers play a key role. Furthermore, it is difficult to manage a complex business in an environment characterized by VUCA (volatility, uncertainty, complexity, and ambiguity). It is also difficult to attract and retain talent unless the CEO is a competent and professional manager, who may or may not be a family member. In the future, the inheritance of wealth will not necessarily be accompanied by the inheritance of management.

These changes would improve the governance of family-controlled companies and transform these companies into professionally managed ones.

Unicorns

India already has 21 unicorns. With continued technological and other disruptions, new start-ups with innovative business models would emerge to challenge the business models of incumbent firms. The number of unicorns would also increase. Unicorns are financed by venture capitals, which install good governance system. In those companies, promoter shareholding remains low even when venture capitalists exit and they grow.

Within the next few decades, many such companies would displace family-controlled companies from their existing position in the capital market. As a result, the dominance of family-controlled companies would decline in the future.

Institutional Investors and Shareholder Activism

In its most general form, shareholder activism means nothing more than an active, engaging shareholder who does not simply consider the investment made as purely financial but as strategic. The most obvious way shareholders may voice their demands is to exercise the voting rights associated with share ownership (Ringe, 2018, p. 536). Shareholder activism takes two forms – formal and informal. Formal shareholder activism is observable in public, such as the voice of dissent in general meetings and hostile takeovers. Informal shareholder activism is close door engagement with the management. ‘Rational apathy’ of dispersed shareholders is a well-known phenomenon. The cost of shareholder activism is much more than the benefits they derive from the same. Institutional investors play an essential role in shareholder activism to benefit the company and improving corporate governance. They adopt informal mechanisms of shareholder activism. Earlier research reports that public pension funds like CalPERS actively engaged in improving corporate governance because they adopt a long-term perspective. On the contrary, mutual funds do not engage in shareholder activism and adopt exit strategy, as they cannot take a long-term view. However, it is now observed that with the fast growth of the mutual fund industry, mutual funds are compelled to change the exit strategy. Their stockholding in a company may be significant when we consider investments made by various schemes. Consequently, they cannot afford to offload their total holdings in a company, which would adversely impact the share price and probably cause a significant reduction in the value of their portfolios (Ringe, 2018, p. 549). As a result, mutual funds have curtailed using exit strategy and show more significant participation in shareholder activism. The introduction of the stewardship code (effective from July 1, 2020) is expected to encourage shareholder activism by mutual funds and other institutional investors.

Institutional investment in Indian companies is increasing. Institutional ownership in Indian companies in 2010 was 15.8 per cent (Dyck et al., 2019), which increased to 33.58 per cent in 2019 (Coutinho, 2019). We may expect that with the general growth in institutional investment, investment in family-controlled companies will also grow. This will enhance shareholder activism and improve corporate governance standards. Foreign institutional investors and institutions from countries with strong shareholder protection are the main promoters of good governance outside the U.S.A. (Aggarwal et al., 2011). As per SEBI Annual Report 2018-2019, on March 31, 2019, a total of 9,390 FPI were registered of which 3,204 from the USA. They held 32.72% of the total AUM. It is not unreasonable to expect that an increase in the investment by institutional investors from the U.S.A. and other developed countries will improve the average standard of corporate governance in India.

Sustainability Business Model and Corporate Irresponsibility

Indian companies lag behind companies in developed countries in adopting a sustainability business model. A sustainable business creates, delivers, and captures value for all its stakeholders without depleting the natural, economic, and social capital. In a letter to the CEO, Larry Fink, the chairman of the Black Rock, the world's largest asset manager, wrote, "Given the groundwork, we have already laid engaging on disclosure, and the growing investment risks surrounding sustainability, we will be increasingly disposed to vote against management and board of directors when companies are not making sufficient progress on sustainability-related disclosures and the business practices and plans underlying them." (Larry, 2020). Most asset management companies across the globe are insisting on adoption of sustainability-related business practices. Pressure from institutional shareholders and SEBI's insistence for adopting the Integrated Reporting Framework will accelerate the adoption of a sustainable business model by Indian companies. In the age of social media and media activism, irresponsible behaviour of companies is circulated widely within no time. Professional managers do not want to get associated with companies having a low reputation. Therefore, companies which indulge in irresponsible behaviour will not be able to attract and retain talent. This will deter companies from indulging in unethical and irresponsible behaviour. Professional managers, who have emerged as the principal actor in the governance of companies, will restrain themselves from taking decisions that would be labeled as irresponsible and could damage their individual reputation and that of their company.

Market pressures

Tirole (2006, p 28) observes, "It is widely agreed that the quality of firm's management is not solely determined by its design of corporate governance, but also depends on the firm's competitive environment". Indian firms are now operating in a competitive environment. Therefore, the product market pressure will impact the quality of governance of Indian companies.

Fama (1980) posits that managerial labour market pressure disciplines the managers of large companies. The career progression and future compensation of managers within the company and outside depends on how the internal and external labour market evaluates the manager's performance. Labour market uses the performance of the firm to determine each manager's outside opportunity wage. Managers realise this and undertake some amount of monitoring in both directions – senior managers to junior managers and junior managers to senior managers. In a competitive environment, the relative performance of managers can be measured as having a positive impact on corporate governance. Moreover, as the practice of recruiting managers through talent search firms, the pressure on managers to perform will increase, as talent search firms collect information from various sources about aspirants for a managerial position.

Indian bankruptcy code

The Insolvency and Bankruptcy Code, 2016 (IBC) was enacted in 2016. It has consolidated the then existing framework for insolvency and bankruptcy. It has all the features of a contemporary bankruptcy law. Roe (2005) observes that when bankruptcy works well, it reduces the debt overhang problem by allowing new financing and removing managers incapable of engineering a turnaround. The Indian law prohibits certain persons from submitting a resolution plan in case of defaults. Those include: (i) wilful defaulters, (ii) promoters or management of the company if it has an outstanding non-performing debt for over a year, and (iii) disqualified directors, among others. Further, it bars the sale of property of a defaulter to such persons during liquidation. This provision disciplines the promoters of family-controlled companies, as promoters of defaulting companies stare at losing control.

CONCLUSION

In the next two decades, the average corporate governance standard will improve. This is driven by several factors, including a reduced dominance of family-controlled companies, better family governance, a dominant role of professional managers in all types of companies, stronger regulations, strengthening of corporate governance institutions and increasing awareness that good corporate governance makes business sense. This perception about the future is based on an analysis of the NSE Nifty-200 companies, which represent about 86.7% of the free-float market capitalization of the stocks listed on NSE as of March 29, 2019. We anticipate that the perception would not change even if we analysed more companies, say the top 2,000 companies. It is possible that the percentage of family-controlled companies will be much higher than that among the top 2000 companies. Still, their impact on the flow of capital to the corporate sector will not be significant. Moreover, through the demonstration effect, corporate governance practices in those companies will improve. However, it is a limitation of our analysis, and it will be interesting to analyse a larger sample of companies.

References

- Aggarwal, Reena, Isil Erel, Miguel Ferreira, and Pedro Matos. "Does governance travel around the world?"
- Coutinho, Ashley. Domestic Institutional Investors' bump up holding in Indian Stocks in June. Business Standard. July 29, 2019. https://www.business-standard.com/article/markets/domestic-institutional-investors-bump-up-holding-in-indian-stocks-in-june-119072901038_1.html (accessed, August 11, 2020)
- Dyck, Alexander, Karl V. Lins, Lukas Roth, and Hannes F. Wagner. "Do institutional investors drive corporate social responsibility? International evidence." *Journal of Financial Economics* 131, no. 3 (2019): 693-714.

Fama, Eugene F. "Agency problems and the theory of the firm." *Journal of political economy* 88, no. 2 (1980): 288-307.

Gupta, Massom. Mahindra Group is not a family business, my daughters are free to follow their heart. *Economic Times* (August 28, 2017) Available at: <https://economictimes.indiatimes.com/magazines/panache/mahindra-group-isnt-a-family-business-my-daughters-are-following-their-hearts-says-anand-mahindra/articleshow/60252978.cms?from=mdr>; Extracted on November 20, 2020.

Larry, Fink. A fundamental reshaping of finance (2020). Available at: <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>; Extracted on November 24, 2020

Raj, Amrit. Bajaj Group plans for Gen Next with a family settlement. *Mint* (January 20, 2019). Available at: <https://www.livemint.com/Companies/W1KcASuM6q2liXL3ALmJRJ/Bajaj-Group-plans-for-Gen-Next-with-a-family-settlement.html>; Extracted on November 23, 2020.

Ringe, Wolf-George. Shareholder activism: a renaissance. *The Oxford Handbook of Corporate Law and Governance* (Oxford Handbooks). OUP Oxford (2018). Kindle Edition.

Roe, Mark J. "The institutions of corporate governance." In *Handbook of new institutional economics*, pp. 371-399. Springer, Boston, MA, 2005.

Roy, Tirthankar. *A business history of India*. Cambridge University Press, Cambridge (2018)

Tandon, Suneera. Gave my kids freedom to follow their passion: Kumar Mangalam Birla. *Mint* (December 7, 2019). Available at: <https://www.livemint.com/companies/people/gave-my-kids-freedom-to-follow-their-passion-kumar-mangalam-birla-11575659391249.html>; Extracted on November 23, 2020.

Tirole, Jean. *The theory of corporate governance*. Princeton University Press (2006)

Tripathi, Dwijendra and Jumani, Jyoti. *The oxford history of contemporary Indian business*. Oxford University Press, New Delhi (2013)

To Short or Not to Short

Samit Paul



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In asset pricing literature, short-sellers are considered as informed traders as their trading behavior often signals adverse news about firm fundamentals (Akbas, 2016). In a frictionless stock market with no binding constraints on short-selling, informed short sellers freely trade based on their information. In most cases, institutional investors take the lead role in this activity and trade based on current conditional expectations of the firm's value. It is obvious that in this process the better-informed investors gain while other retail investors lose money. Regulators across the world deal with this issue differently. While in Europe, hedge funds need to report their short positions to regulators (public) if it crosses 0.2% (0.5%) post-2012, in the US, the daily aggregate short positions of exchanges are maintained by Financial Industry Regulatory Authority (FINRA).¹ Whether such regulatory mechanisms are enough or not is a debatable topic. However, it clearly shows that shorting is somehow under the regulatory rudder, especially after the global financial crisis.

There are enough anecdotal pieces of evidence suggesting that institutional investors are better informed about the investment potential of a stock compared to their retail counterparts (Cai et al., 2010; Yan & Zhang, 2009). Still, recent events show no assurance that such superior information always transforms into economic benefit. One prominent example is the recent surge in the price of GameStop, a US-based video games store operator. This stock experiences a skyrocketed spike in price in the last week of January 2021 that leads to a huge economic loss of certain multi-billionaire hedge funds (short-sellers) and unexpected profit to few amateur retail investors. Astonishingly, it reveals the mighty influence of social media in generating abnormal valuation where fundamental analysis loses its logical significance.

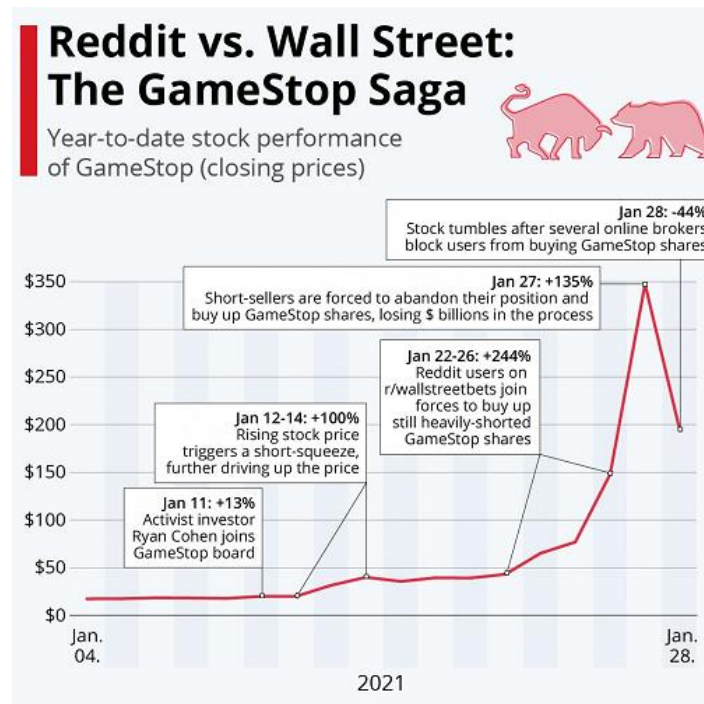
¹ <https://www.pionline.com/article/20151021/ONLINE/151029970/nyse-pleads-for-rules-to-make-hedge-funds-reveal-short-positions>

GameStop Saga

Let's turn our attention to the beginning of the interesting incident of GameStop. Over the years, the financial performance of GameStop is not up to the mark. Being a brick-and-mortar retailer, it has to face tough competition from digital distribution services. Moreover, governance issues have also distorted the perception of the firm in investors' mind. Further, the COVID-19 pandemic has worsened the situation as in-person shopping has been drastically reduced. This is reflected in falling stock price and various institutional investors, such as hedge funds, expect further value loss for this firm. This expectation somehow triggers a popular short-selling strategy and various hedge fund managers start short-selling this stock. It seems to be easy money on the table, which can be pocketed while covering the positions at a further lower price. One such prominent short seller is Melvin capital who invests almost US Dollars (\$) 12.5 billion to take an aggressive short position on the stock.² However, there comes a twist when this strategy has miserably failed due to amateur investors' informal grapevine. Wallstreetbets, an online community on the social news website Reddit, is held responsible for triggering an unexpected short-squeeze on shorted positions of GameStop. The users on this platform note these heavily shorted positions taken by hedge funds and decide to buy more of these stocks to raise their price. The stock price starts rallying and a panic covering from hedge funds results in a price explosion. The stock price has moved up to \$347.51 on January 27, 2021, whereas the same stock was priced at \$19.94 on January 11, 2021.³ This massive growth of more than 1500 percent within two weeks has shaken the world thoroughly. On January 28, 2021, the market experiences a failure to deliver more than 1 million shares of GameStop. The market value of this stock surpasses \$24 billion from \$2 billion just in a matter of few days. This forces Melvin Capital to abandon its short positions and incur a loss of 30 percent of its initial investment of \$12.5 billion. During this phase, short-sellers altogether incur a loss of \$23.6 billion. After hedge funds earn these huge losses, Wall Street starts demanding regulatory help on short-squeeze. Responding to this call for help, numerous online brokers that had let their retailers trade on their platform, banned any purchase of GameStop and allowed only the sale of the same. One of those brokers, Robinhood, however, reversed its decision later on and allowed limited trade from retail investors after hearing a public outcry. Hence, the saga does not come to an end here.

² <https://leadicdesign.com/qnuvhb50/how-much-did-melvin-capital-lose>

³ <https://www.regalunited.com/post/the-legendary-saga-of-gme-gamestop-frenzy>



Source: Yahoo Finance

Social Media: An Emergence

The more informed institutional investors often deride the retail investors as “dumb money.” They are almost considered potential loss-makers who would lose money against the highly skilled analysts and rational decision-makers. The GameStop tale provides a new turn to this game. Keith Gill, a Reddit user, has invested \$53,000 in GameStop in mid-2019.⁴ By January 27, 2021, his positions soar up to \$48 million. Another user posts a funny video on social media showing how a hedge fund is blown up like a nuclear reactor post this incident of a short squeeze. Another young trader posted, “It’s a good opportunity to make money and stick it to the hedge funds.” He also said, “By buying GameStop, it’s kind of like beating them at their own game.” The short-squeeze has resulted in around 73 million page views within one day, as reported by Mashable, a technology news website. Wallstreetbets becomes the fastest growing online community on social media Reddit. On January 29, 2021, overnight the number of users surged by 1.5 million to 6 million members in the Wallstreetbets community.

One alarming impact of this incident is that such banding together is not only restricted to GameStop short squeeze; rather it triggers the same on other stocks as well. On the same day, the short-squeeze was also spotted on the ticker AMC (AMC Theatres). The price of AMC surges around 840 percent. Another popular stock, Blackberry, also experiences approximately 280 percent of upward movement of its share price. Bloomberg reports that the trading volume in the US on January 27, 2021, exceeds the peak volume observed

⁴ <https://www.straitstimes.com/business/invest/how-a-reddit-user-roiled-gamestop-stock-and-the-markets>

during the financial crisis of October 2008. As a result, Robinhood and few other brokers halt purchases of all extremely volatile stocks including GameStop, Nokia, AMC, Koss Corp, Blackberry, Express, etc., on January 28, 2021. Several lawsuits have been filed against these brokers (Robinhood, Charles Schwab, Citadel, etc.) for a forced reduction of stock prices.

The influence of social media on stock price is not very new. Few recent studies have pointed out the role played by social media in promoting “Pump and Dump” (P&D) schemes in a less regulated cryptocurrency market (Li et al., 2019). P&D is one of the favoured methods of price manipulation whereby few investors artificially inflate the price of an asset and then sell those cheaply bought assets at an inflated price (Huang & Cheng, 2015). When the “dumping” of assets is exercised, the price correction takes place and by the time, investors incur a loss. These strategies are common with low priced stocks. In the cryptocurrency market, often P&D is exercised through messaging apps like Telegram. The investors are invited to join the app by posting advertisements on social media platforms. For the stock market, such type of P&Ds may not be discernible as the U.S. Security Exchange Commission (SEC) has deemed P&D as an illegal stock market activity. However, monitoring pranks on online communities is almost an impossible task. Therefore, some mechanisms to ensure social media responsibility is of utmost interest.

Comments and Criticism

Pumping up the price of GameStop by amateur investors as well as limiting the trades by Robinhood and other brokers have attracted several comments and criticisms across wide political and intellectual spectrum. Senator Elizabeth Warren states that institutional investors and analysts who criticize the price rally: "have treated the stock market like their own personal casino while everyone else pays the price".⁵ She demands strong regulatory action against such incidents and invites SEC "to ensure that markets reflect real value, rather than the highly leveraged bets of wealthy traders or those who seek to inflict financial damage on those traders." William F. Galvin, the Massachusetts Secretary of the Commonwealth, criticizes the amateur investors' behaviour commenting to CNBC: "I think we've all recognized the current pandemic has created a unique situation where many have gotten into day-trading and really have no idea exactly what they're doing ... I think small-time investors like that, unsophisticated investors, are going to be hurt by this." Responding to this comment, Kevin O'Leary, a Canadian businessman, has argued that it's a positive learning opportunity from real life. He hopes that the threat of social media may compel hedge fund managers to think twice before short

⁵ <https://www.cnbc.com/2021/01/28/first-on-cnbc-cnbc-transcript-senator-elizabeth-warren-d-mass-speaks-with-cnbc-closing-bell-today.html>

selling aggressively. It has been reported that the state pension fund of New York state has gained immensely from such short squeeze. Experts also believe that these short squeezes would motivate more retailers to invest in stock market and the zero commission brokerage apps like Robinhood will be receiving more business from potential retail investors.

Regulatory Steps

Nevertheless, over the months, regulators have shown enough concerns over this incident. On February 8, 2021, the SEC has released guidelines for companies that plan to raise capital during the period of extreme volatility. The companies are advised to disclose the related risks in their financial statements and inform SEC well before offering such schemes. There has been a growing demand from Wall Street to deem short selling an illegal activity.

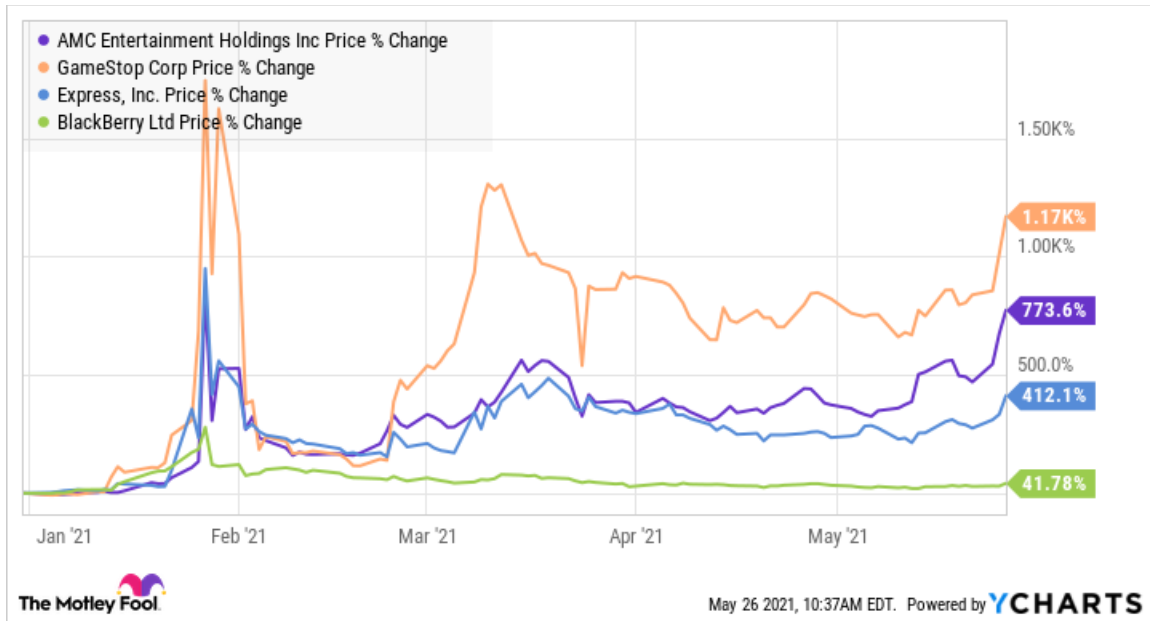
The US regulators are in the mode of devising suitable measures that would motivate institutional investors to disclose more information about short positions, call options and equity swaps held by them. It is also considering increasing transparency in security lending, as this is the root of short selling. Further, it aims to protect common investors' interest by alerting them about those trading apps that carry similar video game-like features but boost risky trading behaviour. Gary Gensler, the SEC chairman, is asking for public input on different trading apps and their features.⁶ "We need to ensure investors using apps with these types of features continue to be appropriately protected," he clarifies.

What's Next?

Although short-selling is still a popular investment strategy, the short sellers of GameStop have incurred mark-to-market loss of nearly \$6 billion year-to-date as of March 8, 2021. Despite having the lowest level of short interest in the year, the GameStop stock experiences another rally on this day (March 8, 2021). However, this rally pertains to the announcement by GameStop regarding the formation of a committee for a smooth transition of brick-and-mortar business to e-commerce mode. Ihor Dusaniwsky, the managing director of Predictive Analytics, quotes: "Shorts will continue to be squeezed out of their positions as GameStop's stock price continues to trend upwards."

⁶ <https://www.reuters.com/business/us-sec-chief-plans-scrutinize-short-sellers-rein-gamification-following-gamestop-2021-05-05/>

Very recently, in the last week of May, the stocks of GameStop, AMC, Blackberry, and Express again experience an upward movement between 10-50 %.⁷ It seems that these meme stocks are moving to ride another wave. The chart below depicts the same:



Source: AMC data by YCHARTS

This time, the fueled price of the stocks are not much of a concern for GameStop and Express. The short positions of these two companies have drastically reduced up to 80% and 50%, respectively, from the start of the year. However, GameStop still holds 12 million shares (18% of shares outstanding) in the short position at the end of April. For Blackberry, there is an increase in short positions though its short interest stays below 10% of outstanding shares. AMC, on the other hand, is still riding the huge risk of a squeeze as its short interest gets doubled. On a positive note, AMC could have managed to raise \$428 million recently through a new offering. Thus, it provides a boost to its balance sheet by taking this timely advantage of the stock rally.

It's now unclear how these possible short squeezes determine the future of short-selling in the long run, and the market reacts to this question differently. For example, Citron Research, a short-seller that earned a loss from the GameStop price rally, is not in favor of publishing its short research anymore.⁸ Rather, it focuses on long-term opportunities from the market. In contrast, Joachim Clement, an analyst, suggests that no 'bubble' sustains for long, and so will be the social group's P&D strategy. He opines that short-sellers would regroup and

⁷ <https://www.fool.com/investing/2021/05/26/why-amc-entertainment-stock-keeps-jumping/>

⁸ <https://finance.yahoo.com/news/citron-stop-publishing-short-selling-160123895.html>

continue exploiting opportunities with short-selling mechanisms again.⁹ Whatever be the reality in future, this current incident uncovers two major issues hidden from market participants. First of all, it shows that small amateur investors can challenge the traditional dominance of big institutional investors. Second, a parallel information revealing system in social media has quickly emerged in the changing global scenario. Further, it may also endanger other innocent retail investors who are not a part of this social media. Hence, the major challenge for the regulators is to bring this entire system under regulatory purview. Otherwise, the loophole in the financial system, which has been exposed by the GameStop saga, would continue to drain wealth from those who invest based on accurate fundamental analysis. More importantly, the so-called better-informed investors would keep looking for a clue of the puzzle: “*To Short or Not to Short*”.

References:

Akbas, F. (2016). The calm before the storm. *Journal of Finance*, 71(1), 225–266.

Cai, J., He, J., & He, J. (2010). How better informed are the institutional investors? *Economics Letters*, 106(3), 234–237.

Huang, Y. C., & Cheng, Y. J. (2015). Stock manipulation and its effects: Pump and dump versus stabilization. *Review of Quantitative Finance and Accounting*, 44(4), 791–815.

Li, T., Shin, D., & Wang, B. (2019). Cryptocurrency pump-and-dump schemes. *Available at SSRN 3267041*.

Yan, X., & Zhang, Z. (2009). Institutional investors and equity returns: Are short-term institutions better informed? *Review of Financial Studies*, 22(2), 893–924.

⁹ <https://blogs.cfainstitute.org/investor/2021/01/31/gamestop-or-why-the-short-sellers-win/>

M&A Outlook 2021

Twinkle Bhagaria



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Global mergers & acquisition (M&A) volumes fell sharply in the first half (H1) of 2020. While that was not surprising, what turned heads was the spiked recovery in the second half (H2) of 2020. It is interesting to trace this journey from businesses trying to salvage what was left after the pandemic shook the ground to the large strategic transactions and investments. In this article, we look at underlying political and economic factors driving the global investment banking industry, with a closer look at the U.S., Europe, Middle East and North America (MENA), and Asia-Pacific (APAC). Analyzing trends evolving in 2020, we try to discuss the outlook for 2021.

Global M&A Tailwinds

While every region has its unique set of factors coming together to drive trends and their respective impact on various industries, some themes evolve globally and create a wave of M&A. Below are some of the major ones we discuss:

1. Valuations are at an all-time high.

In an M&A piece, it is essential to understand where the global market stands in terms of asset valuations. Global market indicators tell us the enthusiasm in the investors and the outlook for overall economic development. However, as I say this, there is a deluge of articles highlighting how markets and the economy seem to have a lower correlation with each passing day.^{1 2} Even as the global GDP forecasts only go south, the market loves North. Nonetheless, there is merit in knowing market valuations, as it directly impacts a transaction and its attractiveness to the business and its investor.

We use the below parameters to study and gauge valuation:

¹ <https://www.cnbc.com/2020/06/03/understanding-the-huge-disconnect-between-the-stock-market-and-economy.html>

² <https://fivethirtyeight.com/features/the-economy-is-a-mess-so-why-isnt-the-stock-market/>

- a. **Bond yields (Treasury, Junk Bonds, and Investment Grade):** Falling bond yields make equity markets more attractive. There is more money chasing less, thereby driving equity valuation upwards. An environment of falling yields serves as a fertile ground for stock deals as expensive stock is an excellent currency for purchasing smaller companies. Figure 1 shows US Treasury yields for the past 5 years. The yields have been falling consistently since 2019 before witnessing some recovery from January 2021 onwards.

Figure 1: US Treasury Yields



Source: https://ycharts.com/indicators/5_year_treasury_rate

Figure 2 shows rising bond prices across Corporate, Investment Grade, & Junk bond classes (the table is as of 12 February 2021).

Figure 2: Bond Prices and Returns (as of February 12, 2021)

	CLOSE	% CHG	YTD TOTAL RETURN	52-WK % CHG	YIELD (%), 52-WEEK RANGE			SPREAD, 52 WEEK RANGE		
					LATEST	LOW	HIGH	LATEST	LOW	HIGH
Broad Market Bloomberg Barclays Indices										
U.S. Government/Credit	2647.37	-0.35	-1.69	4.99	1.220	1.020	2.160	39.00	39.00	132.00
U.S. Aggregate	2262.57	-0.29	-1.23	4.44	1.240	1.020	2.310	34.00	32.00	127.00
U.S. Corporate Indexes Bloomberg Barclays Indices										
U.S. Corporate	3395.05	-0.40	-1.84	5.55	1.900	1.740	4.580	92.00	91.00	373.00
Intermediate	3101.82	-0.12	-0.38	5.67	1.180	1.080	4.400	65.00	65.00	381.00
Long-term	4974.86	-0.86	-4.13	5.23	3.080	2.730	4.930	134.00	134.00	359.00
Double-A-rated (AA)	682.66	-0.45	-2.59	4.20	1.630	1.300	3.360	59.00	53.00	250.00
Triple-B-rated (Baa)	907.79	-0.39	-1.49	5.84	2.140	2.010	5.350	114.00	114.00	457.00
High Yield Bonds ICE Data Services										
High Yield Constrained*	502.18	-0.02	1.37	6.33	3.983	3.965	11.400	350.00	350.00	1087.00
Triple-C-rated (CCC)	473.36	-0.05	3.62	6.81	7.054	6.997	19.071	674.00	673.00	1862.00
High Yield 100	3360.84	-0.03	0.93	4.15	3.279	3.279	10.740	288.00	288.00	1018.00
Europe High Yield Constrained	342.32	0.00	1.37	2.97	2.600	2.464	8.183	320.00	300.00	866.00
Global High Yield Constrained	452.65	-0.01	1.17	5.90	4.070	4.057	11.310	380.00	367.00	1094.00

Source: <https://www.wsj.com/market-data/bonds/governmentbonds>

- b. P/E of Global Stocks: Price-to-earnings ratio indicates how bullish investors are. We see prices rising while the earnings do not necessarily rise at the same rate. The missing piece in this puzzle is “growth” as companies look to expand and grow their market share and customer base. Figure 3 below shows that the trailing P/E ratio of the global equity market is **27.03** as of *December 31, 2020*. The current multiple is considerably higher than the 30-year average price-to-earnings ratio, which might indicate that the global equities are currently overpriced.

Figure 3: Global P/E Ratio

Global Stock Market: Price-to-Earnings Ratio (TTM)

Date	Global Equity Markets P/E (TTM)	MSCI World (Developed) Index P/E Ratio (TTM)	MSCI Emerging Markets P/E Ratio (TTM)
12/31/2020	27.03	28.86	21.26
6/30/2020	19.63	20.61	16.04
12/31/2019	18.99	20.25	15.02
6/30/2019	17.21	18.43	13.26
12/31/2018	15.12	16.09	12.00
6/30/2018	17.95	19.26	13.61

(Source: <https://siblisresearch.com/data/global-markets-pe/>)

- c. Stock Prices and Index Performances: The market is pricing in several factors affecting sky-high valuations. These factors include the recovery from the pandemic, vaccination optimism, central banks supporting recovery through accommodative monetary policies and various governments injecting fiscal stimulus, ease of regulations creating ground for more investment and transactions. Figure 4 below shows the global markets recovering from the deep dive due to COVID-19 last year.

Figure 4: Global Stock Market Indexes

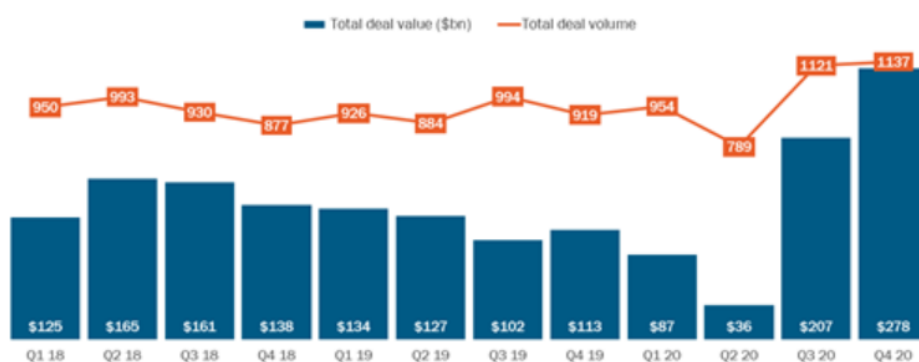
Stock Market Indexes							
	Date	Level	Ch.	This Week ch.	Mon. ch.	Ann. ch.	YTD
DOW [+]	05/14/2021	34,382.13	1.06%	-1.14%	1.93%	45.53%	12.34%
NASDAQ [+]	05/14/2021	13,429.98	2.32%	-2.34%	-3.09%	50.16%	4.20%
S&P 500 [+]	05/14/2021	4,173.85	1.49%	-1.39%	1.19%	46.32%	11.12%
STOXX 50 [+]	05/14/2021	4,017.44	1.64%	-0.42%	1.04%	45.55%	13.08%
FTSE 100 [+]	05/14/2021	7,043.61	1.15%	-1.21%	1.50%	22.68%	9.03%
DAX [+]	05/14/2021	15,416.64	1.43%	0.11%	1.36%	49.14%	12.38%
CAC 40 [+]	05/14/2021	6,385.14	1.54%	-0.01%	2.84%	49.43%	15.02%
NIKKEI [+]	05/14/2021	28,084.47	2.32%	-4.34%	-5.19%	41.02%	2.33%
TOPIX [+]	05/14/2021	1,883.42	1.86%	-2.57%	-3.52%	30.20%	4.36%
IBEX 35 [+]	05/14/2021	9,145.60	2.00%	0.95%	6.49%	39.72%	13.28%
FTSEMIB [+]	05/14/2021	24,766.09	1.14%	0.63%	0.78%	46.83%	11.39%
PSI20 [+]	05/14/2021	5,195.66	1.62%	0.90%	3.30%	31.25%	6.07%
ASE [+]	05/14/2021	907.08	0.85%	1.12%	0.56%	54.23%	12.12%
ISEQ [+]	05/14/2021	8,101.87	1.29%	-2.82%	0.78%	53.50%	9.84%
MERVAL [+]	05/14/2021	54,850.06	4.23%	6.67%	15.96%	39.83%	7.07%
S&P/ASX 200 [+]	05/14/2021	7,014.20	0.45%	-0.94%	-0.13%	31.63%	6.48%
ATX [+]	05/14/2021	3,422.46	1.82%	2.75%	6.75%	61.74%	23.09%
BSE Bahrain [+]	05/12/2021	1,528.79	-0.07%	-0.07%	4.53%	23.43%	2.62%
BEL20 [+]	05/14/2021	4,066.49	0.85%	0.55%	3.34%	40.25%	12.29%

Source: <https://countryeconomy.com/stock-exchange>

2. Digital and Technology Innovation

Having discussed asset valuations, let us look at some more themes across the board. The pandemic has reshaped human lives on multiple fronts, including- healthcare, education, shopping, lifestyle, and work. When several sectors like airlines, hospitality, and textiles struggled to remain afloat, the tech companies facilitating our digital lives garnered superior premium to valuations. Technology M&A declined in H1 2020 due to COVID-19 but increased in H2 2020. Figure 5 below shows a V-shaped recovery in technology transactions on account of pent-up demand from both strategic and financial buyers. This trend of Tech M&A is expected to continue in 2021.

Figure 5: Quarterly Global Tech & Telecom M&A



Source: <https://www.spglobal.com/marketintelligence/en/news-insights/research/2021-tech-ma-outlook-introduction>

It is expected that sponsor-led transactions will continue as global PE firms sit on large dry powder. North American PE firms are estimated to have reserves of close to \$1 Trillion that are waiting to be deployed in “quality assets”.³ Notable recent deals are Avedon Capital’s acquisition of Netzkern and Macaw, which created a new significant technology services group and the largest Sitecore player in Europe.⁴ Furthermore, technology and data analytics is driving companies to ramp up existing capabilities to flourish in the post-COVID-19 era. Some notable transactions include Nvidia’s purchase of Mellanox Technologies (Arm) for \$6.9 billion, Uber’s acquisition of Postmates worth \$2.6 billion, and Adobe’s acquisition of Workfront for \$1.5 billion.^{5 6} We will also continue to see SPAC-led technology acquisition as industry veterans join hands to float

³ <https://www.preqin.com/insights/research/blogs/what-private-equitys-record-dry-powder-haul-means-for-the-industry>

⁴ <https://www.cisco.com/cisco-global-m-a-update-q1-2021/>

⁵ <https://www.visualcapitalist.com/visualizing-biggest-tech-mergers-and-acquisitions-of-2020/>

⁶ <https://www.forbes.com/sites/ilkerkoksal/2020/11/10/adobe-acquires-workfront-for-15-billion/?sh=2ae59f19396e>

blank cheque companies.⁷ Finally, we will continue to witness the surge in data center deals and semiconductor space as the world prepares itself for 5G network capabilities. Notable deals include the Digital Realty acquisition of Interxion (\$8.4 billion).⁸

3. ESG theme

The ESG (Environmental, Social and Corporate Governance) theme is now at the world's center stage, like never before. Sustainability-focused investing is not just an exotic term anymore but a reality for investors and companies, who now want to stay clear of unethical practices, polluting assets and companies with the non-compassionate and indifferent supply chain.

The immediate effect on M&A is, of course, seen in the due diligence of existing transactions where we devote good hours in understanding whether the company has been responsible in the past and has great plans for improvement in the future. The reputational risk is just too high for the acquirer/investor if misconducts are unearthed much later in the process, leading to detailed scrutiny and checks upfront.

Investor presentations, pitches, and analyst day messages now emphasize the carbon neutrality targets, best practices, awards, or recognitions won for sustainable initiatives, pioneering innovation in carbon footprint. ESG will become more vital as a factor in screening targets, providing financing arrangements, and building long-term relationships.

4. Divestitures

The pandemic has affected businesses worldwide across industries, sectors, and regions, and quite unequivocally so. As companies rethink their business models and prioritize core segments over others, they sell non-core assets and business segments to strategic buyers. Figure 6 conveys this increased level of disinvestment in the US in 2021.

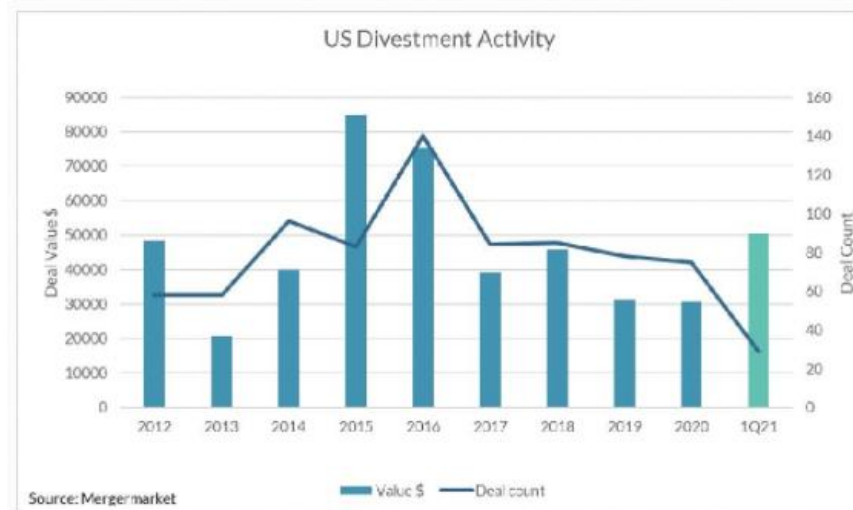
This data can be further extrapolated to predict increased asset sales in the coming quarters of 2021. As the travel & leisure, media & entertainment industries await normalcy and as the fiscal help dries out, we can expect M&A

⁷ <https://www.channele2e.com/investors/technology-spacs-list/>

⁸ <https://investor.digitalrealty.com/news-and-events/news/press-release-details/2019/Digital-Realty-To-Combine-With-Interxion/default.aspx>

or sale transactions as companies combine to repay mounting debts, improve capital efficiency and remain competitive in the industry. It is noteworthy that several industrial & natural resource companies have also followed the route for similar reasons. For example, **General Electric** sold its **GE Capital Aviation Services** to Dublin-based **AerCap** (Top Cross-Border transaction of Q1 2021).⁹ As another example, AT&T's WarnerMedia and Discovery Inc. announced a merger, valued close to \$100 billion, structured as a Reverse Morris Trust transaction.¹⁰

Figure 6: US Corporate Divestitures



Source: <https://www.forbes.com/sites/mergermarket/2021/04/19/as-covid-19-stimulus-wanes-distressed-ma-deals-loom/?sh=38bc4dad52bc>

Next, we take a deep dive into the key markets and look at regional M&A trends

USA

M&A activity in the USA is only expected to grow on the back of fiscal stimulus and vaccination drive. On March 11, US President Biden signed the \$1.9 trillion stimulus package taking the total of the American Rescue Plan Act to about \$5 trillion.¹¹ ¹² More than 58% of adults in the US have received at least one dose of vaccine,

⁹ <https://www.forbes.com/sites/mergermarket/2021/04/19/as-covid-19-stimulus-wanes-distressed-ma-deals-loom/?sh=38bc4dad52bc>

¹⁰ <https://www.bloomberquint.com/business/at-t-to-merge-media-assets-with-discovery-in-43-billion-deal>

¹¹ <https://www.theguardian.com/us-news/2021/mar/11/joe-biden-covid-relief-bill-sign-primetime-address>

¹² <https://www.crfb.org/blogs/american-rescue-plan-could-set-stage-4-trillion-debt>, <https://www.spglobal.com/ratings/en/research/articles/210324-economic-research-for-the-u-s-let-the-good-times-roll-11887507#:~:text=Our%20forecasts%20of%20real%20GDP,the%20highest%20reading%20since%201984.>

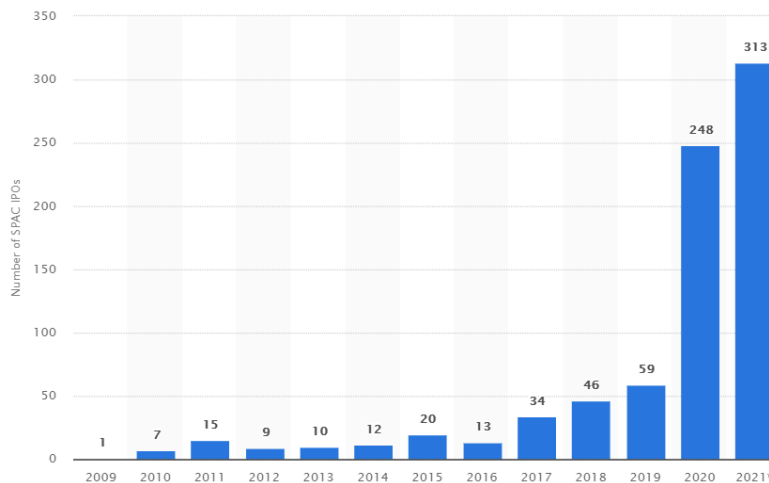
reducing the spread of the virus significantly.¹³ The economy is expected to see real GDP growth of 6.5%, perhaps the strongest in the last 40 years.¹⁴

As mentioned earlier, technology, media & telecom will continue to rule the sectoral pie charts in terms of M&A volume and value. Financial sponsor-led rigorous M&A activity amidst strong fundraising and the need for deployment will keep the M&A chart trending upwards.

The poster boy of US M&A markets lately, SPACs (Special Purpose Acquisition Company) warrant some more attention here. SPACs facilitate early market access, higher capital raise, better business model communication, and growth story-backed investments. They generally target technology & healthcare sectors where the growth lies in a post-COVID-19 world.

As witnessed in Figure 7 below, the year 2020 was supposed to be a record year for SPAC activity, until 2021 beat the charts in just 3 months (January - March). What this chart doesn't tell is the story of April & May 2021 which saw a 90% fall in activity levels, as SPAC activity declined on account of SEC regulations relating to the accounting of warrants issued by these blank cheque companies.¹⁵ In the remaining quarters of 2021, we expect SPAC activity to taper down further.

Figure 7: Number of SPAC IPOs in the US (2009-April 2021)



Source: <https://www.statista.com/statistics/1178249/spac-ipo-usa/>

Strategic cross-border M&A continues to be the preferred international expansion route as companies search for pockets of growth globally. North American firms swoop in to buy European assets & firms, as the travel

¹³ <https://www.usnews.com/news/national-news/articles/2021-05-11/cdc-35-of-americans-fully-vaccinated-against-coronavirus>

¹⁴ <https://www.businesstoday.in/current/world/us-fed-forecasts-strongest-economic-growth-in-40-years-despite-inflation-jump-in-2021/story/434179.html>

¹⁵ <https://observer.com/2021/04/spac-deal-ipo-slowdown-april-sec-crackdown/>

restrictions are easing across the world.¹⁶ Companies acquire capabilities to automate operations and enhance efficiency (rather than developing “greenfield” operations). Europe is showing signs of an economic rebound, thus providing several growth opportunities. Notable deals are: US-based Jazz Pharmaceuticals acquires UK-based GW Pharmaceuticals for \$7.2 billion.¹⁷ US SPAC AJAX acquires UK-based Cazoo in a \$7 billion combination.¹⁸ We expect the Cross-Border trend, both inbound and outbound transactions to continue in 2021.

Europe

As borders opened this year gradually, the pent-up M&A activity brought good news to an otherwise flat European transactions trend of 2019-2020. European M&A volumes are up 34% year-on-year in May 2021, driven mainly by UK & France.^{19 20} UK inbound M&A remains robust as global companies look to enhance capabilities. Growth M&A rose on the back of vaccine rollout, even as companies remained cautious of Brexit’s geopolitical impact. UK volumes would continue to show an uptick in 2021.²¹ For France, the \$16 billion Suez-Veolia (hostile) takeover constitutes close to 50% of M&A value.²² The two largest wastewater companies joined hands to compete with rising Chinese players emerging in the industry. Some European M&A trends include:

- Creation of pan-European champions: As firms navigate the labyrinth of global geopolitical tension, they move towards near-shoring. They are moving back their supply chains to nearby countries to make it shockproof amidst uncertainty.
- Consolidation to create larger, competitive entities: Just like the Suez merger discussed above, the Caxia and Bankia merger would create the largest bank in Spain to improve profitability & efficiency.²³
- Hostile Takeovers to continue in 2021: While Intesa’s aggressive takeover of UBI is feared to create a monopoly, it does go on to cement the Hostile M&A trend in Europe.^{24 25}

¹⁶ https://www.ey.com/en_in/ccb/mergers-acquisitions-strategy-survey-summary

¹⁷ <https://investor.jazzpharma.com/news-releases/news-release-details/jazz-pharmaceuticals-acquire-gw-pharmaceuticals-plc-creating>

¹⁸ <https://www.businesswire.com/news/home/20210328005028/en/Cazoo-to-Become-Listed-on-NYSE-through-7.0-Billion-Business-Combination-with-AJAX-I>

¹⁹ <https://www.mergermarket.com/info/global-dealmakers-cross-border-ma-2021>

²⁰ <https://www.acuris.com/1q21-global-ma-report-financial-league-tables>

²¹ <https://www.iflr.com/article/b1qxjv9n6rr5fl/mampa-report-2021-united-kingdom>

²² <https://www.environmentalleader.com/2021/04/veolia-suez-strike-merger-deal/>

²³ <https://www.cnbc.com/2020/09/18/caixabank-and-bankia-to-merge-creating-spains-largest-bank.html>

²⁴ <https://www.reuters.com/article/us-ubi-m-a-intesa-sanpaolo-idUKKCN24TOP1>

²⁵ <https://www.ft.com/content/4788c0b2-96a1-4c25-bcdd-ac6fb6595219>

The strategic M&A momentum is expected to continue. SPACs looking for target companies & PE-led investing will boost overall activity.

MENA (the Middle East & North Africa region)

The Middle East & North Africa continue to see a meteoric rise in M&A with volumes being 5x & 12x YoY (May 2021) respectively, as companies focus on streamlining costs, boosting efficiency, and optimizing operations. Factors leading to transformational activity in the region are:

- Cash-rich Sovereign Wealth Funds driving M&A activity in the region. Lower interest rates, idle capital, and weak equity markets due to COVID-19 led to huge investments. Saudi Arabia's Public Investment Fund buying stakes in Boeing, Facebook, Walt Disney, Jio Platforms is an example of PE-led M&A volume rise.²⁶
- Battling the twin shock of COVID-19 & lower oil prices, companies consolidated to survive. Saudi Arabia's largest bank NCB combined with Samba Financial Group for \$15.4 billion.²⁷
- Several other factors, including supply chain disruptions, resulted in an increase in domestic activity, public sector consolidation and privatization.
- Egypt becomes a destination of choice for investment inflows.²⁸ Continued economic growth, legal reforms easing foreign investment, the discovery of vast offshore gas reserves lead to a rise in M&A volumes.²⁹

The year 2021 would continue to witness portfolio rejigs, divestments & outbound PE investments leading to heightened M&A in the region.

Asia Pacific (APAC)

Chinese M&A activity accounts for half of the APAC's about \$360 billion transaction value for YTD May 2021, led by technology deals.³⁰ As regulators crack down on technology giants, such as Alibaba, Tencent, and JD.com, to curtail their political & media influence in the country, companies divest their sensitive overseas assets.³¹ Impending divestment in non-core businesses by these online titans would continue to raise M&A charts in 2021.

²⁶ <https://www.arabnews.com/node/1783476/business-economy>

²⁷ <https://www.arabnews.com/node/1747926>

²⁸ https://www.zawya.com/mena/en/wealth/story/Under_the_spotlight_Egyptys_prominent_MA_deals-SNG_185736709/

²⁹ <https://www.arabnews.com/node/1788431/business-economy>

³⁰ <https://www.acuris.com/1q21-global-ma-report-financial-league-tables>

³¹ <https://theprint.in/world/china-crackdown-on-jack-mas-alibaba-drives-200-billion-tech-selloff/575457/>

PE buyout on the back of China's economic recovery and growth prospects is expected to flow into the transport & logistics sector as SOE (State Owned Enterprise) reforms and e-commerce boom multiply the demand for private investment.³² State-led consolidation was evident in Xinjiang Tianshan's acquisition of four regional peers for \$15 billion, as the government looks to bring in structural reforms on the supply side.³³ China's M&A market would be an exciting space to watch in 2021 as activity levels become rigorous.

Indian M&A has been on a strong footing up until Q1 2021 with RMG's acquisition of Renew Power for \$8 billion, being the largest inbound deal.³⁴ Continued investments from PE funds in pharma & technology companies drive the deal volume as the country remains an attractive market on account of its young population. Sino-US trade war puts Indian economy in a sweet spot as investors look to safeguard their returns. However, the 2021 outlook for India is marred by the intense COVID-19 second wave and deal volume is expected to plummet in coming quarters.

Concluding note

The year 2020 is often called the year of two halves. The first half saw nations fighting the virus, which shook the global economy, markets and M&A levels nose-dived.³⁵ The second half saw a remarkable recovery in the deal-making space as companies rushed to gather ammunition for survival and expansion. We expect a recovery in deal activity in 2021 due to vaccination & fiscal stimulus-led optimism. How PE funds deploy the accumulated capital in pockets of growth worldwide would be an exciting story to watch out for. It also remains to be seen how companies move to the tune of pandemic-induced global trends and state-led regional reforms.

³² <https://www.weforum.org/agenda/2020/05/how-reform-has-made-chinas-state-owned-enterprises-stronger/>

³³ <https://www.ft.com/content/e4d0516e-cddc-44e7-8ea6-ea66c7e78b15>

³⁴ <https://renewpower.in/wp-content/uploads/2021/02/RMG-II-ReNew-Power-Transaction-Announcement-Press-Release-Feb-2021.pdf>

³⁵ <https://www.ft.com/content/1caa7059-2e4e-4b9e-b365-8944478509a4>

Financing the Blue Economy

Utkarsh Majmudar



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The oceans and seas cover two-thirds of our earth. Oceans and seas are a vital source of food, employment and livelihood for over three billion people. They also facilitate international trade. Coastal areas are home to nearly 2.4 billion people (Friends of Ocean Action, 2020.). Oceans are also our most significant carbon sink. Oceans absorb around 25% of all carbon dioxide (CO₂) emissions (Shutler and Watson 2020.). This makes them one of the world's largest carbon sinks. Yet, in much of the sustainability discussions, the blue economy receives little attention.

We know of seas for the fish. But there is much more beyond fishing that the blue economy supports. As Table 1 shows, there are many economic activities around oceans and seas (Ahmed, 2019).

Table 1: Economic Activities around Oceans and Seas

Activity	Benefits
Climate regulation	Oceans transport heat from the equator to the poles regulating weather and climate.
Essential life supply	Oceans produce more than 50% world's oxygen and store 50 times more CO ₂ than the atmosphere.
Blue carbon	Mangroves, seagrasses, and salt marshes remove 10 times more CO ₂ from the atmosphere than a typical rainforest. It also stores 3 to 5 times more carbon than rainforests.
Protecting shorelines	Mangroves, seagrasses, and coral reefs protect shores against erosion, storm surge, and flooding.

Activity	Benefits
Energy from the oceans	The ocean can produce thermal energy from the sun's heat and mechanical energy from tides and waves.
Ocean wind power	Higher wind speeds in the ocean help produce more wind energy.
Ecosystem	Oceans support an array of mangroves, seagrass beds, coral reefs, and diverse species of flora and fauna.
Food	Seas account for 15% of animal produces from fish, 80% of global aquaculture, and 60% of global fisheries.
Oil and gas	Offshore oil and gas production supports fuel needs across countries.
Trade and transportation	Seas are a significant conduit of international trade
Tourism	Swimming, boating, snorkeling, diving, and whale and dolphin watch provide significant tourist attractions.
Medicine	Many medicinal products from seas provide relief from infections, cancer, arthritis, heart diseases, and Alzheimer's disease.
Income and jobs	The activities described above provide employment and income to people on seas and coasts.

The blue economy can also be linked to the UN's Sustainable Development Goals (SDGs). SDG number 14 outlines reforms in the marine industries and achieves recovery of the marine ecosystems (United Nations, 2015).

The main targets of SDG 14 are:

- Reducing ocean acidification and pollution of all kinds
- Restoring oceans ecosystems
- Supporting sustainable fisheries
- Ending overfishing

Historically the funding for a sustainable blue economy has come from public and philanthropic sources. Private sector investments have come from more traditional sectors – shipping and fishing. Unfortunately, both these activities are inherently unsustainable. Given the importance of the blue economy and its many touchpoints yet investment into the blue economy is drastically low. Not only has it been low, but a vast chunk of public sector investments have been misdirected in the form of harmful subsidies and investment in oil and gas. It is estimated that only about 1 percent of the ocean economy's total value was invested in sustainable projects through philanthropy and official development assistance over the past decade. According to a report by the High-Level Panel for a Sustainable Ocean Economy, if \$1 is invested in key ocean actions, it can yield a minimum of \$5 over a 30-year horizon (Konar and Ding, 2015).

A report, “Ocean Finance: Financing The Transition To A Sustainable Ocean Economy,” highlights a range of action items to fill the gaps in blue finance (Sumaila, Walsh, Hoareau and Cox, 2020).

1. Set up guidelines and principles for defining sustainable investments in the blue economy.
2. Improving decision-making processes and activities to adapt new knowledge of potential risks, impacts, and opportunities.
3. Creation of effective and stable regulatory and policy environment to incentivize investments.
4. Stimulating the pipeline of investible sustainable projects through risk mitigation.
5. Exploring new financing mechanisms and tools for finance to reach relevant projects.
6. Support mechanisms that limit harmful and illegal activities.

There are many sources of funding for the blue economy.

Impact Only Money:

First is what can be called Impact only money, which has a requirement for generating money. These include public funding, official development assistance, and philanthropic grants. Public funding is money received from the national or state governments to create the infrastructure that serves the public interest. Official development assistance comes from multilateral institutions; for instance, the UN’s FAO provides funds for fisheries and aquaculture, whereas International Maritime Organisation funds shipping projects. Philanthropic grants come from rich individuals, foundations, charities, NGOs, or companies that want to discharge their corporate social responsibility.

Debt:

The second is debt, a popular means of funding blue economy projects. Debt is popular mainly because of its low risk, low reward nature. It also provides flexibility to both borrowers and investors. Debt instruments can be characterized by:

- The entity that borrows and creates the bond is the **issuer**;
- the buyer of the bond is the **holder**;
- the interest paid on the bond at regular intervals until the maturity of the bond is the **coupon**; the bond’s interest rate is referred to as the coupon rate.
- the value of the bond used to compute the coupon amount is the **principal**;

- bonds are issued for a fixed time period after which the principal is repaid. This is called the **maturity** of the bond;
- the time between the issue of the bond and its maturity is referred to as the **term**.

Blue Bonds: One of the most popular types of debt instruments is the *blue bond*. An innovative financial instrument, a blue bond raises money that is earmarked exclusively for ocean-friendly projects. Issuers such as sovereign states invite private sector investors to purchase blue bonds. Then the issuers will provide a return accordingly. Development banks or global funds are expected to guarantee the return.

The world's first sovereign blue bond was launched by Seychelles in 2018. A total of \$15 million was raised to advance the small island state's blue economy. Here the blue bond is partially guaranteed by the World Bank up to \$5 million and further supported by a \$5 million concessional loan from the Global Environment Facility (GEF). Issuers then commit to carrying out some projects in the short run, contributing to ocean sustainability through projects such as Illegal, Unreported, and Unregulated (IUU) fishing eradication, marine plastic debris reduction, ocean conservation, and coastal resilience building, as well as blue carbon projects.

There can be many flavors of blue bonds. The popular ones are:

Use-of-proceeds blue bond: These bonds specify the use to which the bond proceeds are put. Take the case of an offshore wind project that supports renewable energy transition. Now, an offshore company wants to build a new class of ships that provides installations, maintenance, and services to this wind project. The project company signed up for the Sustainable Ocean Principles. They incorporated these principles into their strategy. It issued a five-year use-of-proceeds blue bond to finance innovation and the construction of the ships.

Use-of-KPI blue bond: Here the interest rate that is paid on achievement of KPI's that are set in advance. The use of antibiotics in fisheries is rampant. An aquaculture company wants to reduce its overall use of antibiotics by 90% in all its locations across the globe. The company has signed the Sustainable Ocean Principles and aligned its strategy with them. It also sets up KPI's to measure set annual targets for the reduction of antibiotics and issued a three-year KPI-linked blue bond.

A blue bond issuance requires a framework that covers:

1. **Setting a blue baseline:** This baseline sets out the base over which improvement is sought to be achieved. This exercise helps set up KPIs.
2. **Developing clear and measurable KPIs:** A bond with clear and measurable KPIs is more likely to attract investor response.

3. Disclose sustainability-related metrics on a regular basis: This helps an investor know how her money is being used and builds confidence in the issuer.

Equity:

Finally, there is equity. This denotes ownership in the enterprise. Here the risk profile is different from debt and is preferred by those with a high tolerance for risk. There are many forms of equity used in blue finance:

Private Equity/Venture Capital (PE/VC): These players invest in startups and help them grow. Private equity investors have started taking a keen interest in ESG related startups. They recognize the high risk but are also see opportunities to make a profit.

Public Equity: Public equity provides liquidity to the shares and can be traded by anyone on the stock exchange. Given that these entities already comply with a large number of disclosures, additional disclosures like PRI or TFCFD should be relatively easy. Several companies in the shipping sector and fisheries are publicly traded.

While the market for blue finance is still in its infancy, the focus on marine ecology is increasing, and the market is likely to proliferate. The World Bank has been working on several blue bonds to align projects with SDGs. With growing interest in ESG and SDGs, banks are likely to play a crucial role in building this market. This would be in sync with their efforts to green their financing portfolio. The OECD estimates that the blue economy will be valued at \$3 trillion by 2030 -- double what it was worth in 2010. It is also likely to generate around 40 million jobs. A new constituency in finance is taking shape, and the future of blue finance is bright.

References:

Ahmed, M. 2019. "Blue bonds: What They Are, and How They Can Help the Oceans," World Economic Forum, June 6, 2019, accessed on June 5, 2021, <https://www.weforum.org/agenda/2019/06/world-oceans-day-blue-bonds-can-help-guarantee-the-oceans-wealth/>

Friends of Ocean Action, 2020. "The Ocean Finance handbook: Increasing finance for a Healthy Ocean," April 15, 2020, accessed on June 5, 2021, http://www3.weforum.org/docs/WEF_FOA_The_Ocean_Finance_Handbook_April_2020.pdf

Konar, M., and Ding, H. 2015. "A Sustainable Ocean Economy for 2050: Approximating Its Benefits and Costs, Secretariat of the High Level Panel for a Sustainable Ocean Economy," World Resources Institute, July 14, 2020, accessed on June 5, 2021, <https://www.oceanpanel.org/Economicanalysis>

Shutler, J. and Watson, A. 2020. “The Oceans are Absorbing More Carbon than Previously Thought,” World Economic Forum, October 1, 2020, accessed on June 5, 2021, <https://www.weforum.org/agenda/2020/10/oceans-absorb-carbon-seas-climate-change-environment-water-co2/#:~:text=The%20oceans%20play%20a%20critical,world's%20largest%20'carbon%20sinks'>

Sumaila, U. R., Walsh, M., Hoareau, K., and Cox, A. 2020. “Ocean Finance: Financing the Transition to a Sustainable Ocean Economy,” World Resources Institute, accessed on June 5, 2021, <https://www.oceanpanel.org/blue-papers/ocean-finance-financing-transition-sustainable-ocean-economy>

United Nations. 2015. “Conserve And Sustainably Use The Oceans, Seas And Marine Resources For Sustainable Development,” accessed on June 5, 2021, <https://sdgs.un.org/goals/goal14>

Infrastructure Development Financial Institution – Issue of Sustainability

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The various newspapers report about the intention of the government to set up an infrastructure-focused Development Financial Institution (DFI) to cater to the demand of the sector. The Prime Minister also called for a target of approximately Rs. 100 trillion for infrastructure investments over the 5-year period 2019-2024.¹ India certainly needs this investment as also highlighted by high powered committee on urban infrastructure some years ago. But given the current situation in infrastructure, the COVID-19 impact, and a diminishing headroom for more public expenditure, achieving this target could be daunting, especially in the absence of new avenues of financing these investments. DFIs dedicated to the sector could be considered a panacea for this.

The Central Government is already working on the structure of a new DFI – a specialized institution to offer long-term funds to the sector, where borrowers cannot get it from other sources.² We already have DFIs categorized as All-India or State / regional level institutions depending on their geographical coverage of the operation. Functionally, All-India institutions can be classified as (i) term-lending institutions extending long-term finance to different industrial sectors (some of which turned into commercial banks later on); (ii) refinancing institutions extending refinance to banking as well as non-banking intermediaries for finance to agriculture, Small Scale Industries and housing sector, respectively; (iii) sector-specific/specialized institutions; and (iv) investment institutions. Besides, we have state governments financed DFIs working at state levels.

All these DFIs have not been able to meet the specific needs of the infrastructure sector in a self-sustainable manner. Further, the operating model for infrastructure financing, such as Hybrid Annuity Mode, for private

¹ <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1598055> Finance Minister Smt Nirmala Sitharaman releases Report of the Task Force on National Infrastructure Pipeline for 2019-2025, Posted On: 31 DEC 2019 4:11PM by PIB Delhi

² <https://pib.gov.in/PressReleasePage.aspx?PRID=1693892> - Posted On: 01 FEB 2021 1:45PM by PIB Delhi

investors has undergone frequent changes in recent times, reflecting that developers are unable to sustain for long even when the public sector is taking a majority of the risks.

The long-term funding sources for infrastructure are turning scarce each day and new avenues are not opening. It is a well-known fact that in India, commercial banks have been primary sources of commercial lending as the Indian financial system is dominated by banks and the phenomenal growth in bank financing to infrastructure brought certain undesirable consequences like high stressed assets.³ These infrastructure sector NPAs of the banking sector are sizable. Banks recognized nearly 8% of their total advances to the sector as gross Non-Performing Assets (NPA). As a whole, about 13% of banking sector's NPA were from the infrastructure. Furthermore, between the fiscal years ending March 2009-2016, infrastructure sector's stressed assets and restructured standard assets accounted for not only 17% of the banking sector's total exposure to the infrastructure sector but also 21% of the total stressed assets.⁴

Given this, it is natural to discuss the nature and model of such dedicated DFI before we move ahead with adding another monolith backed by typical government support and then finding it difficult to sustain its balance sheet. Infrastructure requires very long-term sources of funds, and scale of investment as in Prime Minister's vision statement certainly require a big DFI but the model cannot be like before. With commercial banks facing asset-liability mismatch in lending of resources for infrastructure, such need acquires more teeth.

There can be two basic models of such DFI: either government-backed or stakeholders supported with a private sector character. In the case of it being a government-backed institution, there is an advantage of the ease of fundraising. Further, the securities from such DFI could be made Statutory Liquidity Ratio (SLR) eligible and thus encourage banks and other financial institutions (FIs) to subscribe to such securities to meet Statutory Liquidity Ratio obligations. However, the moment it acquires government control, there is a heightened chance of oversight from 5Cs – Central Bureau of Investigation, Central Vigilance Commission, Controller & Auditor General, Chief Information Commission and Courts. Even most of the prudent decisions could be termed wilful mistakes in hindsight. A DFI with a private sector character would first require the political will to believe in the private sector and maintain a distance (i.e., an arm's-length relationship) from the institution, say in the form of directed lending or say priority-sector lending. For example, the government in such set up can keep its stake limited to 26% or 49%, i.e., not acquire a majority role.

³ <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/02SPF85BA0826CDB403C8A06274B13526AA0.PDF>

⁴ <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/02SPF85BA0826CDB403C8A06274B13526AA0.PDF>

Banks can also subscribe to the DFI's securities and this could be one source of funds for the DFI. Because of the absence of mature corporate bond markets in India, subscription of equity by the public, pension funds, private equity, other patient capital like sovereign wealth funds could be the other sources of funds for the DFI.

The question is to whom will the DFI lend: commercially viable (or so to say economic) infrastructure, social infrastructure, or both. Most of these investments are at the municipal level, and so it is imperative to look at the pattern of expenditure at this level. For example, the high-powered committee on infrastructure in its report projected urban infrastructure expenditure in 2021-22 at Rs. 3,30,242 Crores and in 2031-32 at Rs. 7,31,605 Crores. For the year 2021-22, the capital expenditure is around 54% of such investment, whereas Operation & Maintenance costs and establishment charges constitute 25% and 21%, respectively. This data clearly shows that about half of the investments are non-recoverable, as we already know in India, the focus is still on recovering Operating and Maintenance Cost than CAPEX. In such a scenario, will the DFI be willing to take such a sustainability risk? On the one hand, it would require lending at a sub-prime rate due to the under-pricing norms of credit lending to infrastructure sectors. On the other hand, it would invest money in avenues where two-third of the investments cannot be recouped.

The solution is not merely creating a DFI, a monolith like before. That would again land the institution at the same problems of funds mismatch. It is well established in finance that full cost recovery plus profit only can sustain an investment, support the related service level and avoid the asset-liability mismatch trap. If the government can think of outsourcing establishment costs and operating & maintenance costs in infrastructure projects to private entities, we can see potential savings in these costs due to entrepreneurial spirit and efficiency gains. The remaining part, the CAPEX, can be borne by the government at least in the short run.

Counter to this view could be that governments (including central or state or Urban Local Bodies, or municipal level organizations) do generate sufficient tax and non-tax revenues and so there is no need to worry about the sustainability of funding. But, for example if we see the revenue of municipal corporations, it shows stagnant behaviour (being only 1 per cent of GDP) during the period from 2007-08 to 2017-18.⁵ Out of their total revenue, about 53% were earned by them, whereas the remaining were received from other sources (such as state government, central government, finance commission, etc.). Furthermore, of their total expenditure, three-fifth was revenue expenditure. After accounting for capital expenditure, their account deficit was nearly 6%.⁶ A municipality's tax revenue (mostly property taxes) a major share of its own revenue, although the share is

⁵https://fincomindia.nic.in/writereaddata/html_en_files/fincom15/StudyReports/State%20of%20Municipal%20Finances%20in%20India.pdf

⁶https://www.nipfp.org.in/media/medialibrary/2013/08/IMFR_FINAL_REPORT.pdf

declining over time. Municipalities also earn non-tax revenues from charges for various services.⁷ However, given the high degree of inefficiency in the provision of such services, municipalities could increase their non-tax recoveries by 39% and reach the Jawahar Lal Nehru Urban Renewal Mission (JNURM)'s 85% coverage level threshold.⁸ The increase in non-tax revenue may be possible due to one-time events like land sales; however, most of charges levied on land sale is one-time revenue, lumpy and irregular. Further, this increase in revenue of municipalities on account of land sales is not sustainable.

The question then arises: how will this DFI be sustainable in its lending since most of the investments as per national infrastructure pipeline will be in sectors dominated by government expenditures wherein cost recovery of OPEX and Establishment Charges is still a question, the CAPEX recovery being far from thought? Is the government intention only in the rerouting of funds without an adequate return on investments? Will a DFI with a private-sector nature be willing to lend to a non-commercially viable project? If not, what is the solution? Certainly, creating a DFI cannot be a panacea if we want to solve the problem. The recovery of costs is something that the government of the day must ensure for the long-term sustainability of infrastructure projects, and so is the monetary environment. For example, we can no longer afford to fund the subsidy to a huge irrigation sector at the cost of marginal taxpayers and like so in other sectors. A DFI could be an approach and not a solution to the infrastructure financing problem unless the projects are self-sustainable. There is assumption that DFIs would operate with no mismatch in their asset liability management; but due to longer duration of borrowing raised by them, their cost of borrowing could rise. This would hit both ways, leading to lower profits to shareholders and cost of projects turning high or both. As DFIs are expected to fund projects on a large scale, this issue of lower profits or higher project costs can be significant and should not be ignored.

While talking of asset liability management risk, we mostly think of the maturity mismatch. But movement in interest rates heavily influence the real (as against contractual) maturity of a loan. Despite there being clauses for interest rate reset in most of the infrastructure projects, the benefit does not accrue equally between borrower and lender. While the borrowers get the benefit of lower interest rates, the increase in the rate is not easy to pass on to a borrower.

The public sector banks have under-priced the credit risk for infrastructure projects mainly on account of misaligned incentives and weak credit assessment mostly due to 'project finance' nature of infrastructure projects. Private sector lenders also under-priced the risk because of competition from the public sector banks.

⁷ Such services include water supply, sanitation and solid waste management, drainage and sewerage, slaughterhouses, marketplaces, etc.

⁸ https://www.nipfp.org.in/media/medialibrary/2013/08/IMFR_FINAL_REPORT.pdf

Till 2004-2012, when the economy and the loan books kept growing fast, the negative effects of the mispricing of the risk was not visible. However, post global slowdown of 2008, the lenders became exposed to accumulated credit losses due to default in projects on account of falling revenues as compared to projected ones (for example, Delhi Airport Metro which failed merely due to lower passenger revenue being realised than was hyped), and increasing costs besides wilful mistakes being discovered like leakages of toll revenues in highways projects on

Build Operate Transfer (BOT) basis, poor project and debt structuring by banks without adequate guarantee or collateral. The result is a vast amount of infrastructure loans turned into non-performing assets as seen in paragraphs above.

To summarise, the setting up of DFIs is not the only way to solve our problem of project finance. It would effectively put the onus of financing on the government. The real problems of our financing sector are related to governance, contract adherence, project feasibility and risk management at both the macro and micro levels. The government needs to recognize project sustainability in longer run with full cost recovery as only option besides developing adequate framework of regulation, incentive and risk management.

References:

1. *High Power committee report on Urban Infrastructure, "Report on Indian Urban Infrastructure and Services, 2011"*
2. *Development Bank for Infrastructure Funding, 7 September 2020, <https://www.drishtias.com/daily-updates/daily-news-analysis/>*
3. *After years, Govt Plans new development bank for big infra funding, 6 September 2020, <https://indianexpress.com/article/business/economy/development-bank-dfi-sitharaman-6584723/>*
4. *DFI Is Not The Solution For Infrastructure Projects, 25 August 2020, <http://www.businessworld.in/article/DFI-Is-Not-The-Solution-For-Infrastructure-Projects/25-08-2020-312737/>*
5. *Issues in Infrastructure Financing in India, N.S.Vishwanathan, RBI Bulletin December 2016, <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/02SPF85BA0826CDB403C8A06274B13526AA0.PDF>*

6. *State of Municipal Finances in India, A Study Prepared for the Fifteenth Finance Commission, Indian Council for Research on International Economic Relations,*
https://fincomindia.nic.in/writereaddata/html_en_files/fincom15/StudyReports/State%20of%20Municipal%20Finances%20in%20India.pdf
7. *Municipal Finance Matters: India Municipal Finance Study, National Institute of Public Finance and Policy* https://www.nipfp.org.in/media/medialibrary/2013/08/IMFR_FINAL_REPORT.pdf
