ISSN 2321 – 9378

IMI Konnect

Volume 9, Issue 3, 2020

An IMI Kolkata Publication

Highlights

COVID and the Economy and Banking | Technology in Business Today | Impact of Labour Codes | Purchase Behaviour during COVID | COVID and Business Education

About *IMI Konnect*

IMI Konnect, published quarterly from International Management Institute Kolkata, is an open access Scholarly Publication in Management. It started its journey in December 2012, and publishes original research articles (non-technical) by scholars in the field of management and firsthand perspectives from business thinkers and practitioners on contemporary issues. ***IMI Konnect*** provides an intellectual platform for the national and international scholars and the industry experts to discuss and debate their opinions and thus contribute to the knowledge of management. It also publishes interviews with eminent personalities in the field of business.

The articles will go through a review process before publication. The issues are themed on Marketing, Finance, Organisational Behaviour & Human Resources (OB & HR), Information Technology & Operations (IT & Operations), Strategy, Economics and Management. The publication caters to academicians and practitioners in corporate and government organizations and departments.

Contents

Manuscript Submission Guidelines

The article should be non-technical and should be of around 2500 - 4000 words. The research articles may be upto 7000 words. But no mathematical expressions or technicalities of methods should be contained in the main text. It should be typed in MS Word in Times New Roman 12 with paragraph spacing 1.5. Figures and simple, small tables can be incorporated. There should not be any notations or equations, at least in the main text. If required, it may be put in Appendix. The article should also contain a short abstract of 150 – 200 words. Full forms of each abbreviation should be mentioned at first instance. All figures and diagrams should be in black and white. Send your manuscript along with your name, institutional affiliation, email ID and contact number to the editorial office at imikonnect@imi-k.edu.in mentioning the area viz. Marketing, Finance, OB & HR, Economics, Strategy, IT & Operations, Management Education, Others or Themed Issue.

For copies/queries and submission, please contact *IMI Konnect* editorial team at imikonnect@imi-k.edu.in or call +91 33 6652 9664

Introduction of Labour Codes and Its Possible Impact on Labour Market

Kingshuk Sarkar*

Abstract

The central government (Ministry of Labour & Employment) has introduced labour codes in recent times. These codes are supposed to replace the existing labour laws. There are 44 labour laws enacted on the part of the central government. The four codes are supposed to categorize the existing labour laws into four broad segments namely wage, social security, industrial relations and occupational health safety welfare. The four proposed codes (one is already a valid piece of legislation) may have profound impacts on the workings of the labour market. This article discusses such impacts in greater detail.

Introduction

The matter of labour reforms has been under discussion over the last two decades in India. The dominant narrative is that there are multiple labour laws and most of those are quite old and have lost relevance in the present scenario. It is also believed that these labour laws are adversely affecting India's employment potential. Employers' organizations were rooting for thorough labour reforms as part of the second generation reform from the late nineties and early 2000. Thereafter, the idea of labour reform is in wide circulation entailing debates in the public domain. Nothing much happened till recently when the Centre initiated formulation of four codes in 2017. Some interim attempts have been made to rationalize and simplify labour laws at state level. Measures have also been initiated to improve the efficiency of the labour administration and maintaining its relevance in the present context.

Labour is in the concurrent list. Reform processes have started both in the central and state spheres. Centre is presently engaged in formulating labour codes (wage, welfare, social security and industrial relations) as part of rationalization and simplification of labour laws. Labour codes are part of the rationalization process where existing labour laws are broadly classified into four categories. Once the codes are in place, these would replace numerous labour laws that exist presently.

Certain provisions proposed in these four

*Joint Labour Commissioner (P), Govt. of West Bengal
Views are personal

codes would have far reaching impacts on the workings of the labour market in India. The proposed codes in the present form do not signify a radical departure from the existing provisions. However, there are certain provisions which might impact labour market in a significant manner. In this article, attempts are made to assess the possible impacts that these four codes would have on the Indian labour market.

Code on Wages

The Code on Wages 2019[1] was passed by the Parliament and subsequently, it came into existence on August 8, 2019 through necessary gazette notification. Subsequently, the central government has prepared a rule to implement the Code on Wages 2019. The draft Code on Wages Rules 2019[2] has been put in the public domain in the recent past before finalizing. Comments and observations are being sought from stakeholders and in general. The rule is supposed to provide the basis for formulating the procedures on which the code is to be implemented. This code subsumes the following four Acts: The Payment of Wages Act, 1936; The Minimum Wages Act, 1948; The Payment of Bonus Act, 1965 and The Equal Remuneration Act, 1976.

Following provisions in the Code on Wages involve contentious issues.

Inherent Gender Discrimination

Under Section 6 and Rule 3, it is proposed that minimum wages should be fixed on the basis of the standard working class family which includes a spouse and two children apart from the earning worker; an equivalent of three adult consumption units (1+.8+.6+.6=3)[3]. However, standard working class family should be equivalent to 3.5 consumption units. Present calculation is based on 1+.8+.6+.6=3. It should be 1+1+.75+.75=3.5. Gender discrimination in the form of lower consumption (0.8 instead of 1) of the female adult member of the family should be avoided. Further, child calorie requirement is not as low as 0.6 and should be at least enhanced to 0.75. Children require greater calorie during their growing years.

Importance of Non-Food Items

Existing practice is that non-food consumption is taken as a dependent of food expenditure. Food consumption is given the paramount importance in consumption basket and non-food consumption is taken as a residual and derived. Non-food consumption is taken as 25 per cent of food

[1] *The Code on Wages* (2019). Retrieved from: http://egazette.nic.in/WriteReadData/2019/210356.pdf

[2] *Preliminary draft of the Wages (Central) Rules under Section 67 of the Code on Wages, 2019 -for inputs/comments/suggestions of all Stakeholders,* (2019). Retrieved from:https://labour.gov.in/whatsnew/preliminary-draft-wages-central-rules-under-section-67-code-wages-2019

[3] Govt. of India, 2019. Retrieved from: https://www.indiabudget.gov.in/budget2019-20/economicsurvey/index.php

consumption. However, consumption pattern has undergone significant changes over the years and non-food items are presently important in their own rights and no longer are derived demand. Quantum of non-food items should be determined independently. With an increase in income, the importance of non-food items also increase.

Revision of Basic Component of Minimum Wage

Minimum wage is a dynamic concept. With inflation, purchasing power goes down. Purchasing power parity is maintained through Dearness Allowance (DA) adjustments. The objective is to sustain a specified real wage over time such that a certain amount of consumption is ensured. Revision in DA depends on the movement of Consumer Price Index (CPI) twice in a year. While such calculation seems to be fine, there must be provision for revising the 'basic' component of minimum wage also. This aspect is missing in the rule. A new section should be introduced to provide the mechanism to redefine the 'basic' part based on periodic survey on family budget expenditure. Consumption pattern changes over time. Certain products lose their relevance whereas certain new products come into existence. Consumption basket should change accordingly. Family budget expenditure survey should happen every 5 years and the 'basic must be revised accordingly. Otherwise, minimum wage revision through periodic DA adjustments will not suffice to maintain sustainability over time.

Working Hours Extended

Code on Wages Rules 2019 proposes that the number of hours of work which shall constitute a normal working day inclusive of the period of rest should not exceed twelve hours. If this is implemented, there is a possibility that certain employers would take an advantage of such expanded window and reduce three shifts to two shifts. Given the exploitative nature of Indian employers and labour market imbalances where supply far exceeds demand, hours of work including spread-over should not exceed more than ten and a half hours. Twelve hours of work will detain the workers unnecessarily and provide scope for rampant misuse. Already in a number of instances, three shifts have been converted into two shifts for all practical purposes.

Rationale for Floor Wage Missing

In addition to minimum wage, the Code on Wages Act 2019 provides for national floor wages. However, the rationale for having floor wages[4] and the manner of determination of the

[4]Kumar, A. (2019). India Has a New Code to Simplify Law on Minimum Wages – But It Doesn't Give Workers Any Real Benefit, *Scroll.in*. Retrieved from: https://scroll.in/article/939763/india-has-a-new-code-to-simplify-law-on-minimum-wages-but-it-doesnt-give-workers-any-real-benefit

same have not been defined in the draft rules. Also, there should be clarification regarding how floor wage is different from minimum wage. It seems floor wage has different connotations as opposed to minimum wage. Such distinctions should be clearly spelt out.

Centre-State Dialogue

Labour is in the concurrent list and Centre-State consultation becomes imperative on most labour issues. As per the draft rules, the central government shall obtain the advice of the board and consult such state governments as it thinks necessary before fixing the floor wage under Rule 11. Modalities of such consultation should be clearly spelt out and Standard Operating Procedure (SOP) be defined to guide such consultation. Otherwise, consultation may happen in a superficial manner. There should be statutory norms in such instances. There is justified apprehension that consultation with the state governments may end up as a formality only under certain cases unless the process is statutorily defined.

Inspection Convention/Norms

Also, the draft rules provide that the Chief Labour Commissioner shall formulate an inspection matrix with approval from the central government. In that inspection matrix, the inspection schedule of each inspector cum facilitator is to be determined through randomization under ordinary circumstances. Here, it may be mentioned that the inspection matrix should not be conceptualized/designed in a centralized manner. Schedule of inspection should be prerogative of the inspectors/facilitators. The inspection matrix and its proposed formulations pre-suppose certain things which violate International Labour Organization's principle of inspection norm (Convention 81)[5]. The inspector/facilitator should have sovereign power to inspect any premises if s/he thinks it appropriate. The inspection mechanism should not be diluted under any circumstances.

Draft Code on Social Security

The Code on Social Security, 2019[6] once in place will merge eight existing labour laws including Employees' Compensation Act, 1923; Employees' State Insurance Act, 1948; Employees' Provident Funds and Miscellaneous Provisions Act, 1952; Maternity Benefit Act, 1961; Payment of Gratuity Act, 1972; Cine Workers Welfare Fund Act, 1981; Building and Other Construction Workers Cess Act, 1996 and Unorganized Workers' Social Security Act, 2008.

[5] *C081 - Labour Inspection Convention, 1947 (No. 81).* Retrieved from: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C081

[6] *The Code on Social Security, 2019 - Comments Invited from Public by 25th October, 2019.* Retrieved from:https://labour.gov.in/whatsnew/code-social-security-2019-comments-invited-public-25th-october-2019

This proposed code has a few significant repercussions on the labour market outcomes.

Issues of Informal Sector Labour

In this context, it can be said that a major part (93 per cent) of India's labour force is in the unorganized sector[7]. About half of the unorganized sector workers are self-employed where it would be very difficult to decipher any sort of employer-employee relationship. Most of the unorganized sector workers are not attached to any specific occupation. Rather they shift from one form of occupation to another based on availability and moreover the unorganized sector workers are footloose in the sense they keep on moving from one place to another in search of livelihood. Most of the unorganized sector workers fall within the state purview rather than central purview.

In fact, it would be difficult to even define appropriate government for the unorganized sector workers since they are mostly employed through layers of intermediaries. There may be unorganized sector social security boards at the central and state levels but a major part of these organizations seem to be with states. The scope of the central board seems very limited but the state boards have serious constraints with regards to financial resources compared to the task in hand. Also as the unorganized sector workers spread across the entire length and breadth of the country, inter-state arrangement and cooperation becomes all the more imperative. The code does not provide for such eventualities. Ideally, central government should conceptualize a basic structure which if successful should be adopted by the states after necessary customization. Without such basic structure, implications of this code would be too varied across the states to be administered.

Universal Social Security Still Elusive

Also, the issue of providing holistic social security cover for the entire unorganized sector workforce in a simple effective manner is something which is lost in the centre-state labyrinth and jurisdictional, institutional overlapping. Unorganized sector workforce is all encompassing minus the minuscule regular workers of the organized sectors. This identity should be primal and all unorganized sector workers should have access to basic social security coverage irrespective of labour market classifications. Such inclusion in an easy meaningful way is something which is missing in the code. The concept of universal social security for all is a concept which is missing and had been dealt with bits and pieces manner in the code.

Corporatization of EPFO and ESIC

The pension, insurance and retirement saving bodies including Employees' Provident Fund Organization (EPFO) and Employees' State Insurance Corporation (ESIC) will be body

[7] *Economic Survey, 2018-19*. Retrieved from: https://www.indiabudget.gov.in/budget2019-20/economicsurvey/index.php

corporate. The word body corporate has been added in the draft and this is qualitatively different from the present definition. The draft also talks about the appointment of chief executive officers (CEOs) in these organizations indicating that the labour minister, labour secretary, the central Provident Fund (PF) commissioner and Director General of ESIC may not be by default the head of such organizations.

Corporatization[8] of EPFO, ESIC as indicated in the code would bring an element of uncertainty in the portfolio management. ESIC and EPFO together have the custody of a huge sum of money meant for a sizable section of the workforce. This money belongs to the registered workers themselves and leaving the custody outside governmental control seems a bit risky given the records of corporate fund management in recent years.

Inclusion of Gig Workers

Inclusion of gig or platform workers within the code is an innovative approach keeping in pace with the changing world of work. This should remain open because new forms of labour emerge with changes in technology[9]. General terms like gig or platform workers are appropriate because it will absorb a whole range of people within its fold. Future of work entails that there would be further mystification of employer-employee relation using digital technology. Workers would seem independent and self-employed[10] in such a context and provision of social security would remain inadequate or even non-existent. Code does take this aspect into account to a certain extent.

Code on Industrial Relations

The Industrial Relations Code, 2019 was introduced in Lok Sabha by the Minister of Labour and Employment, Mr. Santosh Kumar Gangwar, on November 28, 2019. It seeks to replace three labour laws: (i) the Industrial Disputes Act, 1947, (ii) the Trade Unions Act, 1926, and (iii) the Industrial Employment (Standing Orders) Act, 1946.

The proposed code has got few significant repercussions on the working of the labour market. These are as follows.

Fixed Term Employment

Fixed Term Employment (FTE) means the engagement of a worker on the basis of a written contract of employment for a fixed

[8]Nanda, P.K. (2019). Draft Social Security Code Is Out: Five Things You Need to Know, *Livemint.* Retrieved from: https://www.livemint.com/industry/human-resource/draft-social-security-code-is-out-five-things-you-need-to-know-1568885337037.html

[9]Storey, D., Steadman, T., and Davis, C. (2019). How the Gig Economy Is Changing the Workforce, *EY Americas.* Retrieved from: https://www.ey.com/en_us/tax/how-the-gig-economy-is-changing-the-workforce

[10]Spoke, M. (2019). California's Gig Worker Law … Is Going To Fail, *Forbes.* Retrieved from: https://www.forbes.com/sites/mattspoke/2019/09/30/californias-gig-worker-law—is-going-to-fail/#2f5395a47009

period provided that

(a) hours of work, wages, allowances and other benefits shall not be less than that of a permanent workman doing the same work or work of similar nature; and

(b) he shall be eligible for all statutory benefits available to a permanent workman proportionately according to the period of service rendered by him even if his period of employment does not extend to the qualifying period of employment required in the statute.

Introduction of FTE in the Code on Industrial Relations will make the labour market a bit more flexible. Along with growing contractualization/informalization, whatever few regular employments that still remain, might now go the FTE way. FTE is a good option for the employers as they have the option to terminate employment at the end of the contract period. Other obligations too would be limited to the period of employment only. Employers are also free not to renew the contract if they are not happy with the performances. Employers in India, in general, believe permanency make employees complacent and as a result productivity suffers. FTE would keep employees on tenterhook and they would be always eager to contribute more on the expectation that the contract would get renewed. There are certain core positions where you require regular employees. Such positions might go to FTE as this becomes legally tenable.

Lay-off and Retrenchment

The code defines lay-off as the inability of an employer, due to shortage of coal, power, or breakdown of machinery, to give employment to a worker. It also provides for employers to terminate the services of a worker, i.e., retrenchment. Employers of industrial establishments such as mines, factories and plantations with at least 100 workers are required to take prior permission of the central or state government before lay-off, retrenchment or closure. The central or state government can modify this threshold number of workers by notification. There is a distinct possibility that few states would enhance the threshold limit (for example to 300) such that for a large number of units lay-off and retrenchment can happen without taking any prior permission from the appropriate government. Labour market becomes more flexible and lay-off, retrenchment becomes much easier. A flexible labour market becomes more flexible.

Occupational Safety, Health and Working Conditions Code, 2019

Occupational Safety, Health and Working Conditions Code, 2019 was introduced in the Lok Sabha by the Minister of Labour and Employment, Mr. Santosh Kumar Gangwar, on July 23, 2019. Following this, it was referred to the Standing Committee on Labour and Employment on October 9, 2019. Standing Committee report was submitted on February 11, 2020.

This proposed code subsumes 13 legislations namely Factories Act, 1948; Mines Act, 1952; Dock Workers Act, 1986; Contract Labour Act, 1970; Inter-State Migrant Workers Act, 1979; Plantation Labour Act, 1971; Motor Transport Workers Act, 1961; Working Journalists Act, 1955; Sales Promotion Employees Act, 1976; Building & Other Construction Workers Welfare Act, 1996; Cine Workers Welfare Fund Act, 1981; Beedi and Cigar Workers Act, 1966; Working Journalist and Other News Article Employees Act, 1955.

This particular code did not bring any significant changes in the existing acts that it proposes to subsume. Existing acts become chapters in the proposed code. The code didn't propose to withdraw employee threshold limits that exist in existing acts. Thus, many workers in the unorganized sector are still outside the protective provisions of respective labour laws. The probable impacts on the labour market are as follows:

The Second National Commission on Labour (2002) had recommended consolidation and simplification of existing health and safety laws. However, the code continues to retain special provisions for various categories of workers such as working journalists and sales promotion employees. The rationale for retaining such provisions is unclear.

The code covers workers employed in establishments with at least 10 workers or more. It has been argued that size-based thresholds for applicability of labour laws help in reducing the compliance burden for small establishments. On the other hand, it has been argued that occupational health and safety laws should cover all workers, to protect their basic rights.

It has been argued that the application of labour laws based on the number of employees is desirable to reduce the compliance burden on infant industries and to promote their economic growth. To promote the growth of smaller establishments, some states have amended their labour laws to increase the threshold of their application. For instance, Rajasthan has increased the threshold of applicability of the Factories Act, 1948, from 10 workers to 20 workers, and from 20 workers to 40 workers. Note that a similar amendment was proposed in the Factories (Amendment) Bill, 2014, which lapsed with the dissolution of the 16th Lok Sabha.

Conclusion

Formulation of codes earlier in 2017 promised quite a few things but what transpired later in the form of proposed draft codes was bit of a dampener. Existing laws are old and have become irrelevant in certain cases. It was expected that such limitations would be corrected and labour laws would be made to sync with present-day realities. There have been significant changes in the world of work during the last three decades. Enactment/amendment of laws should reflect the new realities. It can't be said that those expectations are fulfilled to a reasonable extent. Rather certain new introductions in

the proposed codes have considerably lessened protection available to the workers. Codes did not address the issue of provision of universal social security to all sections of the unorganized workers. The codes have made the labour market more flexible and in the process made employees more vulnerable in terms of job security. The focus is on the ease of doing business and the provision for decent work environment has got compromised in the process. A large number of informal sector workers still remain outside any protective legislation. The formulation of codes was an opportunity to bring interventions in the labour market to protect the interests of the workers. That expectation has been belied to a large extent. The labour market outcomes that may arise because of this would be detrimental to the interests of a vast number of workers.

COVID-19 and Its Implications for Economy and Banking

Soumya Kanti Ghosh*

Abstract

The ongoing outbreak of COVID-19 has become one of the biggest reasons behind frayed nerves of the global economic system and financial markets. World is in dire situation with COVID-19 cases rising significantly. Globally COVID-19 confirmed cases have crossed 26 million mark and number of deaths also crossed 0.87 million mark (as of September 4, 2020). Against this backdrop, this article aims to analyse the implications of COVID-19 on Indian economy and banking. We will discuss about the emergence of new macro-economic thinking post-COVID-19 before we elucidate some important suggestions for the revival of the economy and banking.

Introduction

The ongoing outbreak of COVID-19 has become one of the biggest reasons behind frayed nerves of the global economic system and financial markets. Since the outbreak of COVID-19, the whole world has witnessed a major downfall in global economic activities which in turn have adversely affected all the income groups around the world. A serious trade off being faced by the union and state governments is that of 'life vs. livelihood'. Starting initially with measures in varying intensity across the country, the unprecedented nationwide lockdown which came into effect from March 25, 2020 is having an impact on the social and economic networks of the country. With postponement of non-essential expenditures which also account for nearly 80 per cent share in Goods and Services Tax (GST) revenues, the aggregate demand continues to remain depressed. The supply chain disruptions both globally and domestically have brought production activities to a halt in almost all industries. While in the service sector, travel and tourism remains the worst hit so far, the effect will translate to primary and secondary sectors as well with declining investment, rising unemployment and depressed consumption resulting in low real output.

The world is in dire situation with COVID-19 cases rising significantly. Globally, COVID-19 confirmed cases have crossed the 26 million mark and the number of deaths has

*Ph.D; Group Chief Economic Adviser, State Bank of India, Mumbai

also crossed 0.87 million mark, with about 6.3 million cases in the US, 4 million in Brazil and 3.9 million in India (as of September 4, 2020). India currently stands at the 3rd position with more than 3.9 million cases and around 68,570 deaths. Almost all districts in India have confirmed cases of COVID-19 with number of districts with cases between 1000 and 5000 increasing significantly. Also, if we look at the trend of new cases in rural districts to total new cases, the figure has risen significantly to 54 per cent in August, 2020. Also, the number of rural districts with less than 10 cases has reduced significantly. State-wise trend indicate that states are yet to reach a peak (on the basis of analysis of positivity rate and tests per million) and the situation will remain grave till the time number of tests increase significantly.

Against this backdrop, this article aims to analyse the impact of COVID-19 on Indian economy and banking. The article is divided into two parts: (i) implications on economy; (ii) implications on banking. Thus, in the next section, various aspects of COVID-19 impact on economy have been discussed, while the impact on banking has been discussed in the subsequent section. The section thereafter summarises some new ways of economic thinking. In the last section, we have elucidated some important suggestions for the revival of the economy and banking.

Implications for the Economy

Global Growth

It is very difficult to measure the exact damages from the COVID-19 pandemic on an economy. The pandemic is expected to plunge most countries into recession in 2020, with per capita income contracting in the majority of countries globally since 1870. According to IMF, global growth is projected to decline by 4.9 per cent in 2020[1]. The pandemic has had a more negative impact on activity in the first half of 2020 than anticipated, and the recovery is projected to be more gradual than previously anticipated. The adverse impact on low-income households is particularly acute, imperilling the significant progress made in reducing extreme poverty in the world since the 1990s.

However, country-wise Q2 2020 real Gross Domestic Product (GDP) growth rates are a bit surprising as growth has not plunged so much as it was anticipated. Apart from a few economies almost all economies declined by less than 20 per cent y-o-y (Table 1).

Domestic Growth

India's GDP growth plunged by 23.9 per cent in Q1 FY21 due to the nation-wide lockdown imposed on 25 March 2020 in the wake of COVID-19 pandemic. The real Gross Value Added (GVA) declined by 22.8 per cent as almost all sectors except agriculture have

[1]*New York Times,* June 24, 2020. https://www.nytimes.com/2020/06/24/business/imf-world-economic-outlook.html#:~:text=The%20International%20Monetary%20Fund's%20chief,recession%20since%20the%20Great%20Depression.

Table 1: Real GDP Growth/Decline of Major Economies during Q2 2020 (%)

Country	Q-o-Q	Y-o-Y	Country	Q-o-Q	Y-o-Y
Singapore	-42.9	-13.2	Bulgaria	-9.8	-8.2
United States	-31.7	-9.1	Germany	-9.7	-11.3
India (FY21)	-29.3	-23.9	Brazil	-9.7	-11.4
Japan	-27.8	-9.9	Thailand	-9.7	-12.2
Peru	-27.2	-30.2	Slovenia	-9.6	-13.0
Tunisia	-20.4	-21.6	Serbia	-9.2	-6.4
United Kingdom	-20.4	-21.7	Iceland	-9.1	-9.3
Spain	-18.5	-22.1	Poland	-8.9	-8.2
Mexico	-17.1	-18.7	Czech Republic	-8.7	-11.0
Malaysia	-16.5	-17.1	Netherlands	-8.5	-9.3
Philippines	-15.2	-16.5	Sweden	-8.3	-7.7
Croatia	-14.9	-15.1	Slovakia	-8.3	-12.1
Colombia	-14.9	-15.7	Switzerland	-8.2	-9.3
Hungary	-14.5	-13.6	Israel	-8.1	-7.8
Portugal	-13.9	-16.3	Australia	-7.0	-6.3
France	-13.8	-18.9	Denmark	-6.9	-8.2
Chile	-13.2	-14.1	Latvia	-6.5	-8.9
Italy	-12.8	-17.7	Estonia	-5.6	-6.9
Romania	-12.3	-10.5	Lithuania	-5.5	-4.2
Belgium	-12.1	-14.4	Norway	-5.1	-4.7
Euro Area	-12.1	-15.0	Finland	-4.5	-6.4
Cyprus	-11.6	-11.9	Indonesia	-4.2	-5.3
Canada	-11.5	-13.0	South Korea	-3.2	-2.7
Turkey	-11.0	-9.9	Taiwan	-1.4	-0.6
Austria	-10.4	-12.5	Hong Kong	-0.1	-9.0
Ukraine	-9.9	-11.4	China	11.5	3.2

Source: https://tradingeconomics.com/

registered huge decline (Table 2). If we leave aside the agriculture and government components, the slowdown is even more severe, with our real core GVA growth coming at -29.6 per cent and nominal core GVA growth at -29.7 per cent. This is India's worst growth performance since the country started reporting quarterly GDP data in 1996. On the 2004-05 base, India's lowest quarterly GDP growth was 1.66 per cent in Q3FY03, thereafter it has increased continuously but declined in recent period.

The surprising part is 10.3 per cent decline in 'Public Administration, Defence and Other

Table 2: GVA at Basic Price by Economic Activity (%)

Sectors	FY 20				FY 21
	Q1	Q2	Q3	Q4	Q1
Agriculture	**3.0**	**3.5**	**3.6**	**5.9**	**3.4**
Industry	**4.2**	**0.5**	**-0.3**	**-0.6**	**-38.1**
Mining & Quarrying	**4.7**	-1.1	**2.2**	5.2	**-23.3**
Manufacturing	**3.0**	-0.6	-0.8	-1.4	**-39.3**
Electricity, Gas, Water Supply & Other Utility Services	**8.8**	3.9	-0.7	4.5	**-7.0**
Construction	**5.2**	2.6	0.0	-2.2	**-50.3**
Services	**5.5**	**6.5**	**5.7**	**4.4**	**-20.6**
Trade, Hotels, Transport, Communication & Services Related to Broadcasting	**3.5**	4.1	4.3	2.6	**-47.0**
Financial, Real Estate & Professional Service	**6.0**	6.0	3.3	2.4	**-5.3**
Public Administration, Defence and Other Services	7.7	10.9	10.9	10.1	**-10.3**
Total GVA at Basic Price	**4.8**	**4.3**	**3.5**	**3.0**	**-22.8**
GDP	**5.2**	**4.4**	**4.1**	**3.1**	**-23.9**

Source: NSO, SBI Research

Services' where it was expected that COVID-19 would have the least effect. Two points can be made on this. First, public administration and defence include other services such as education (private tuition/coaching centres), health (nursing homes / personal care services) and other services such as social and personal services which were in a complete lockdown mode in Q1 FY21. It is also possible that state governments and particularly local bodies were in lockdown mode in Q1 FY21.

State-wise Per Capita Income Loss and Debt

Using the bottom-up approach we also estimated output loss in each state according to level of activity which was then added for the overall GDP loss. We estimated that total Gross State Domestic Product (GSDP) loss due to COVID-19 for the states stand at ₹38.0 lakh crore, which is 16.9 per cent of total GSDP. The loss was estimated after carefully mapping the activities permitted. State-wise analysis indicates that the top 10 states accounted for 73.8 per cent of total GDP loss with Maharashtra contributing 14.2 per cent of total loss followed by Tamil Nadu (9.2 per cent) and Uttar Pradesh (8.2 per cent). These top-10 states have accounted for around 81 per cent of total confirmed COVID-19 cases in India. Subsequently, the per capita loss for all India is around ₹28,000 with states like Tamil Nadu, Gujarat, Telangana, Delhi, Haryana, Goa, etc. exhibiting loss of more than ₹40,000 per person in FY21.

The huge losses for the states will result in an increase in borrowings which will lead to an increase in the states' debt. The increase in per capita debt along-with increase in per capita income loss[2] will be detrimental for economic growth, going forward. We estimated the correlation coefficient between jump in per capita debt (PD) and per capita income (PCI) loss, by all the three methods, i.e. Pearson's Correlation, Spearman's Rank Correlation and Kendall's tau. All the estimated results are significant and linearly correlated: R = 0.86, r = 0.93 & Tau = 0.72 (Table 3).

Interestingly, there is no direct causality between the variables PD and PCI, clearly indicating the presence of an independent factor that is pushing up both of these in unison. Our results show, out of 20 states for 11 states like Telangana, Haryana, Andhra Pradesh and Maharashtra etc., PCI loss is more than the national average level. The jump in PD is at least 0.7 times that of the Centre for states like Maharashtra, Kerala, Haryana, Tamil Nadu and Karnataka.

Table 3: Correlation Coefficient between Increase in Per Capita Debt and Per Capita Income Loss

Method	Correlation Coefficient	p-Value
Pearson's Correlation	0.86	0.0074
Spearman's Rank Correlation	0.93	0.0015
Kendall's tau	0.72	0.0025

Source: Author's Computation

GDP Contraction and Mortality Rate

Mortality is one of the basic components of population change and related data is essential for demographic studies and public health administration. The mortality rate (number of deaths per 1000 population) at all India level has declined significantly from 14.9 to 12.5 during 1971 to 1981 and thereafter from 9.8 to 5.7 during 1991 to 2018[3]. The decline has been steeper in rural areas as compared to urban areas. Mortality rates are impacted by various factors and one of these is economic growth. There is considerable evidence of the fundamental importance of economic growth to the decline in mortality rate (Renton *et al.*, 2012; Brenner, 1979; RBI, 2019).

Based on this assumption, we estimated the increase in mortality rate due to huge decline in states' net state domestic product (NSDP) due to COVID-19 restrictions. We run a simple Ordinary Least Squares (OLS) regression model (for major states) using per capita NSDP (at current prices) as independent variable and mortality rate as dependent

[2]Per capita income loss is calculated for all states and UTs but reported for major 20 states only.

[3]Office of the Registrar General & Census Commissioner, India, Ministry of Home Affairs, Government of India, (2018). *Estimates of Mortality Indicators*, (SRS Statistical Report 2018, Chapter 4). Retrieved from: https://censusindia.gov.in/vital_statistics/SRS_Report_2018/11.%20Chap%204-Estimates%20of%20Mortality%20Indicators-2018.pdf

Table 4: Mortality Rate (per 1000) for Most Affected States

States	Baseline Mortality Rate (2018) (A)	COVID-19 Mortality Rate or Lives Lost because of COVID-19 (B)	Lives That Could Be Lost because of 10% GDP Contraction (C)	Overall Mortality Rate Post COVID-19 (A+B+C)	Health Infrastructure (Number of Isolation Beds per 1 lakh Population)
Maharashtra	5.50	0.34	1.28	7.12	250
Tamil Nadu	6.50	0.17	0.81	7.48	29
Andhra Pradesh	6.70	0.09	0.47	7.26	77
Karnataka	6.30	0.18	0.75	7.23	298
Delhi	3.30	0.28	2.14	5.72	129
Uttar Pradesh	6.60	0.16	3.41	10.17	45
West Bengal	5.60	0.21	0.62	6.43	12
Bihar	5.80	0.05	1.88	7.73	6
Gujarat	5.90	0.36	1.21	7.47	51
Assam	6.40	0.02	2.37	8.79	12
Rajasthan	6.00	0.15	1.86	8.01	33
Odisha	7.30	0.07	1.73	9.10	13
Haryana	5.90	0.11	0.85	6.86	122
Madhya Pradesh	6.70	0.25	1.71	8.66	44

Source: Author's Calculations: Mortality rate is regressed as a function of state GDP for arriving at C

variable[4]. The result is presented in Table 4, column 3.

Our estimated results indicate that the state-wise mortality in addition to COVID-19 mortality due to 10 per cent decline in State Domestic Product (the average across all states is 16 per cent) may increase by 0.47-3.5 per cent as we are navigating through COVID-19 by imposing restrictions on livelihoods through unplanned exit from lockdown and entry into fresh lockdowns across states (Table 4). In fact, the isolation beds per 1 lakh population is significantly low in several states like UP, Bihar, West Bengal, while it is highest in Karnataka followed by Maharashtra.

Implications on Banking

With the continuous lockdown, the banking business also contracted significantly. Credit

[4]The equation we estimate is: ***Mortality Rate*** = + ***(NSDP)*** +

demand has ebbed away across all sectors, despite the post-IL&FS shift among large borrowers, including NBFCs and housing finance companies (HFCs), away from non-bank sources and towards the banking system for meeting funding requirements. The unabated weakening of economic activity, coupled with deleveraging of corporate balance sheets and risk aversion by banks due to asset quality concerns, was accentuated towards the close of the year by the pandemic woes, producing a reduction in the incremental credit-deposit ratio. The credit-to-GDP gap remained wide during 2019, reflecting the slack in credit demand and is likely to remain weak in current fiscal also (Figure 1).

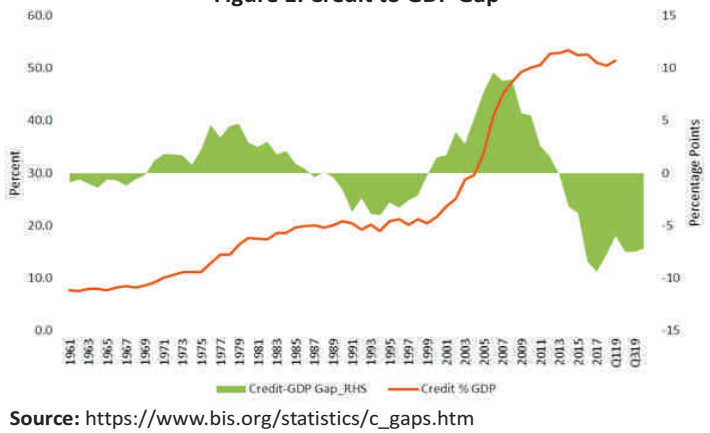
Impact on Banking Business

RBI's expansionary monetary policy helped the banking system to ease the liquidity constraints but credit offtake from All Scheduled Commercial Banks (ASCBs) remained muted. For the fortnight ended July 31, 2020, credit has increased by 5.5 per cent on YoY basis, however declined on YTD basis. On a positive note, except one fortnight, credit has been increasing continuously since May'20. The sector-wise credit-data indicates that except industry, credit has increased in all other major sectors in July. There has been a significant increase in credit to MSE, agri & allied and personal loans. A large part of agriculture loans may be gold loans.

Credit to personal loans has bounced back to the pre-COVID period (Table 5). There has been a significant increase in credit to all sub-segments of personal loans in the month of July, notably loans to salaried individuals. Going forward, credit to personal loans is expected to increase in the coming months, due to festive season.

The classification of the sectors according to the risk due to COVID-19 and further mapping into their credit ratio history in FY20 reveals the sectors that could be hardest hit by COVID-19 crisis. Overall sectoral risk based on credit ratio (rating upgrades/rating downgrades) depict sectors such as automobile, hotel, aviation, gems & jewellery, NBFC, power, real estate and construction and engineering could be affected severely with combined impact.

Figure 1. Credit to GDP Gap



Source: https://www.bis.org/statistics/c_gaps.htm

Table 5: Monthly Change in ASCBs Personal Loans (₹ Billion)

	February 2020	March 2020	April 2020	May 2020	June 2020	July 2020
Consumer Durables	0.4	28.0	-3.9	-2.1	1.4	2.8
Housing (Including PSL)	125.1	99.7	-82.5	-15.6	67.6	116.6
Advances against Fixed Deposits	82.3	40.3	-115.9	-43.1	-21.4	8.6
Advances against Share, Bonds, etc.	0.0	1.5	-5.2	-3.2	13.0	5.9
Credit Card	0.8	-28.5	-111.2	-40.9	47.0	38.1
Education	-4.8	-8.2	-5.0	-0.4	-1.9	0.8
Vehicle Loans	8.9	-5.2	-36.4	-24.2	0.5	30.9
Other Personal Loans	135.3	88.4	-268.5	10.2	8.9	204.8
Personal Loans	348.0	216.0	-628.6	-119.3	115.2	408.5

Source: SBI Research

Impact on Non-Performing Assets (NPAs)

Following the COVID-19 led lockdown, businesses across the sectors were impacted severely. Companies are looking at a broad range of interrelated issues that span from keeping their employees and customers safe, shoring-up cash and liquidity, reorienting operations and government support programmes. For the benefit of all, RBI has allowed banks to give moratorium on loan instalments and deferment of interest payments till end of August 2020 and banks have offered the same option to their customers. As per RBI, around half of the customers accounting for around half of outstanding bank loans opted to avail the benefit of the relief measures. As per the RBI financial stability report, Public Sector Banks (PSBs) loan moratorium stood at 67.9 per cent, private banks (PVBs) at 31.1 per cent, foreign banks at 11.5 per cent, Small Finance Banks (SFBs) at 62.6 per cent, Urban Cooperative Banks (UCBs) at 64.5 per cent and Nonbank Financial Companies (NBFCs) at 49 per cent (Table 6). When looked sector-wise, individual customers have availed this facility to the maximum extent, 50.4 per cent of total customers taking moratorium on 55.3 per cent of their total loan outstanding.

The Q1 FY21 results of the banks indicate a sequential decline in NPA numbers, which is because of the fact that the moratorium has prevented any loan account to be downgraded and helped banking industry in fresh slippages but the real picture will emerge after the September quarter (Table 7). However, due to the ongoing COVID-19 crisis, Reserve Bank of India (RBI) macro-stress tests for credit risk indicate that under the baseline scenario, ASCBs Gross Non-Performing Assets (GNPA) ratio may increase to 12.5 per cent (14.7 per cent in a very severe stress

Table 6: Loan Moratorium Availed as on April 30, 2020

Sector	Corporate		MSME		Individual		Others		Total	
	% of Total Customers	% of Total Outstanding	% of Total Customers	% of Total Outstanding	% of Total Customers	% of Total Outstanding	% of Total Customers	% of Total Outstanding	% of Total Customers	% of Total Outstanding
PSBs	28.8	58	73.9	81.5	80.3	80	48.8	63.7	66.6	67.9
PVBs	21.6	19.6	20.9	42.5	41.8	33.6	39.1	40.9	49.2	31.1
FBs	32.6	7.7	73.3	50.4	8.4	21.1	75.8	4.8	21.4	11.5
SFBs	78.8	43.7	90.5	52.3	90.9	73.2	64.6	12.3	84.7	62.6
UCBs	63.4	69.3	66.5	65.5	56.8	62	35.6	59.2	56.5	64.5
NBFCs	39.7	56.2	60.7	61.1	32.5	45.9	37.3	41.4	29	49
SCBs	24.7	39.1	43.1	65.3	52.1	56.2	45.7	55.7	55.1	50
System	30.8	41.9	45.8	65	50.4	55.3	45.7	54.6	48.6	50.1

Source: RBI; SBI Research

scenario) by March 2021 from 8.5 per cent in March 2020. Capital to Risk (Weighted) Assets Ratio (CRAR) may fall from 14.6 per cent in March 2020 to 13.3 per cent (11.8 per cent in a very severe stress scenario) by March 2021.

Table 7: Bank-Wise Gross NPA Movement (%)

Banks	Dec-19	Mar-20	Jun-20
ICICI Bank	6.0	5.5	5.5
HDFC Bank	1.4	1.3	1.4
Axis Bank	5.0	4.9	4.7
Yes Bank	18.9	16.8	17.3
IndusInd Bank	2.2	2.5	2.5
Kotak	2.5	2.3	2.7
SBI	6.9	6.2	5.4
Punjab National Bank	16.3	14.2	NA
Bank of India	16.3	14.8	
Bank of Baroda	10.4	9.4	
Canara Bank	8.4	8.2	
Union Bank of India	14.9	14.2	
Indian Overseas Bank	17.1	14.8	
Bank of Maharashtra	16.8	12.8	

Source: SBI Research

However, the moratorium data as published by RBI are at variance with data published by banks and NBFCs. One of the reasons why the numbers in the table is on higher side could be that primarily in retail loans, some of the banks have initially given blanket moratorium / opt in to all their customers irrespective of their willingness and eligibility and such data was initially reported as one size fits all. However, in reality, most of the customers still continued to pay for their EMIs. Subsequently, all these customers are reported in moratorium, though they are continuing payments of their EMI dues.

As far as the corporate portfolio is concerned, our analysis clearly reveals that companies with adequate balance sheet strength have also opted for a breather. We believe such companies are purely using the moratorium to conserve cash in current uncertain times.

Sector wise analysis, from a sample of more than 300 companies with total rated debt of around ₹4 lakh crore by ICRA reveals at least 40 per cent of such amount is in sectors that have a comfortable debt equity ratio. These are companies in pharma, FMCG, chemicals, healthcare, consumer durable, auto etc. Further, rating wise analysis of the said sample shows that around 70 per cent of the total moratorium, by total rated limit, has been availed by companies which are rated A and above. Clearly, as of now the moratorium data for both retail and corporate is not significantly perturbing.

However, this is based on our premise that cash flow of the corporates would improve post lockdown, but with the spate of unplanned and unintelligent lockdown mania across the country, the situation is now quite different. The job market continues to be in significant state of flux with news of layoffs gaining traction across several sectors. Thus, it is imperative that restructuring of loan accounts in select sectors is used as a policy option after August 31, 2020 to mitigate such stress that has now been allowed by RBI. Finally, we also should ensure that the banking sector is adequately capitalized and must avoid a repeat of what happened after the global financial crisis. This is possible if banks exercise utmost caution and adequate due diligence in their commercial decisions.

New Ways of Economic Thinking Post-COVID-19

Each and every big event brings something new for the economics. The era of policy making post World War I was guided by Keynes' ideas. By the 1970s it had encountered problems that it could not solve and so, in the 1980s, the monetarist era, most commonly associated with the work of Milton Friedman, began. In the 1990s and 2000s economists combined insights from both approaches. But now, in the debris left behind by the COVID-19 pandemic, a new thinking is emerging.

Even before COVID-19, policymakers were starting to focus once again on the greater effect of the bust and boom of the business cycle on the poor. According to World Bank, under the baseline scenario, COVID-19 could generate 176 million additional poor at $3.20 and 177 million additional poor at $5.50. This is equivalent to an increase in the poverty rate of 2.3 percentage points compared to a no-COVID-19 scenario. And hence a new sense of urgency has emerged behind a shift in thinking policy making in economics.

Conclusion and Policy Suggestion

After a decline of 23.9 per cent in real GDP growth in Q1, now the question arises how much growth will decline in subsequent quarters. When we look at the activity index, in July 2020 and August 2020, there has been moderation in activities. Our preliminary estimate indicates that all the four quarters of FY21 will exhibit negative real GDP growth and decline of full year growth likely to be in double digits and will be around 10.9 per cent Q2 real GDP decline will be in the range of -12 per cent to -15 per cent, Q3: -5 per cent to -

10 per cent and Q4: -2 per cent to -5 per cent.

Under the current situation, it is thus advisable to approach the policy from the point of view of demand. The current stimulus package under *Atmanirbhar Bharat* has 40 per cent monetary stimulus that is through RBI and remainder is fiscal stimulus. Within the fiscal stimulus, the government has taken reforms which are essentially supply-side measures such as de-risking MSME. The sectors such as construction, trade and hotels need to be revived. Restoring transportation services and giving a big push to infrastructure by issuing special bonds to RBI like perpetual bonds, zero coupon bonds that could mitigate debt servicing must be explored.

One of the areas where the Q1 estimates have to be taken with caution is the way the informal sector has been incorporated in the estimates. The informal manufacturing is generally incorporated by taking IIP as proxy. However, with pandemic and reverse migration how the informal sector has been impacted can only be known by full survey. Thus, full impact of the COVID-19 in Q1 is not known completely.

A resilient system in place for detecting, managing, preventing new cases is also important to consider. Further, as the testing facility scales up, it needs a further push, longer the delay more will be the opportunity costs for economy demanding extended lockdown. Early identification can help in devising appropriate measures and approach towards limiting the spread and a clear picture about territories (districts or states) where economic activities can be restored back to normalcy.

References

Brenner, M. H. (1979). Mortality and the National Economy: A Review, and the Experience of England and Wales, 1936-76. *The Lancet*, 314(8142), 568-573.

Ministry of Statistics and Programme Implementation, National Accounts Statistics, www.mospi.nic.in

Renton, A., Wall, M., and Lintott, J. (2012). "Economic Growth and Decline in Mortality in Developing Countries: An Analysis of the World Bank Development Datasets", *Public Health*, Vol. 126, Issue 7, Pages 551-560.

Reserve Bank of India (2019), "Handbook of Statistics on Indian Economy", Reserve Bank of India

Reserve Bank of India, *Monthly Bulletin*, various issues

SBI Research, https://www.sbi.co.in/web/about-us/research-desk

World Bank, Open Data, data.worldbank.org

Technology: The Heart of Business Continuity

Snigdho Sundar Kundu*

Abstract

With the breakout of the pandemic caused by COVID-19 and countries imposing lockdowns, the continuity of the businesses has been challenged. Companies that had adequate investments in technologies such as Digital, Cloud, Analytics and Automation have been the beneficiaries of the current situation. This article discusses how these technologies came into play and how they are posing to be a major competitive advantage in the new normal. The article also discusses the advantages of the current modus operandi and how its continuation is going to impact corporate profitability, customer convenience and the economy at large in the future.

Introduction

Technology had been well known as an enabler of business for a long time until the COVID-19 pandemic challenged businesses in an unprecedented way. Earlier, businesses investing heavily in technology, and those that did not invest much in technology were coexisting and running simultaneously. Often, businesses thought that technology is good to have and not yet a must have. The pandemic induced lockdowns have put the second category of businesses almost out of business. Some of the glaring examples are the restaurants and the physical retail outlets. On the contrary, e-commerce, which had only a 1.6 per cent share of retail sales[1] and was still struggling to be profitable, is experiencing demand to shoot through the roof. In the face of this unprecedented challenge, technology has proved that it is not just an enabler of business but at the very core of business continuity. In order to run business smoothly, companies are now investing heavily in Digital Technology, Cloud, Analytics and Automation.

In simple terms, Digital Technology or simply Digital may be defined as an ecosystem in which a task can be performed through information exchange through a network such as the internet without being present at the physical point of action. Examples of such tasks are buying groceries through a mobile

*Business Intelligence Engineer, Amazon.com

[1]The Economic Times (2019). Online Is 1.6% of Retail Sales in India: World Bank, *ET Bureau,* December 17, 2019. Retrieved from: https://economictimes.indiatimes.com/industry/services/retail/online-is-1-6-of-retail-sales-in-india-world-bank/articleshow/72811360.cms?from=mdr

application, expressing thoughts and emotions to others on social media and attending a class of mathematics at Harvard University sitting in Darjeeling. The cloud, on the other hand, is a computing resource or infrastructure, available on demand, without having ownership of such computing resources. Software on demand such as Google Sheets, computing power in the form of virtual machines from Amazon Web Services (AWS) and data storage capability such as Google Drive fall under this category.

Analytics refers to the discovery of patterns, or extraction of knowledge and wisdom, from data using systematic computational analysis. Typically, such data has the characteristics of high volume (i.e., generated in large quantities), high velocity (i.e. generated too fast), high variety (i.e. both structured and unstructured), and high variability (i.e. disparate and stored in multiple destinations). Examples of analytics outputs are recommendation systems used in e-commerce websites to recommend products, dynamic pricing of transport systems such as taxis and airlines, detecting fraud transactions on credit cards etc.

Automation is a method in which processes are redefined or reengineered to perform on their own, or with minimal human intervention. Chatbots replacing customer service associates, driverless cars replacing internal combustion engine cars and their drivers, machine translation services such as Google translate replacing human translators are all examples of automation.

Even though, the above concepts have been defined individually, it is very hard for any one of these to exist individually without assistance from the rest. The four concepts are interconnected. They work in collaboration to deliver some of the most well-known products that mankind has ever experienced. It may be worthwhile to discuss the history of how technology came so far, to a point where it is irreplaceable for the human progress.

The article focuses on the current scenario of the technology in businesses. The next section describes a brief history of commercial internet. The following section presents a discussion on a pertinent topic called value migration followed by sections on the interaction between different new facets of the digital ecosystem and adoption of these new technologies at present. The impact of the pandemic is also discussed. The final section concludes the article.

Historical Background of the Commercial Internet

The commercial use of the internet began in the 1990s. Between 1990 and 1997, the household ownership of computers rose from 15 per cent to 35 per cent[2]. This marked the

[2]Statista (2018). Percentage of Households in the United States with a Computer at Home from 1984 to 2016, Survey by *US Census Bureau,* August, 2018. Retrieved from: https://www.statista.com/statistics/214641/ household-adoption-rate-of-computer-in-the-us-since-1997/#:~:text=Computers%2FPCs%20household%20adoption%20rate%20in%20the%20U.S.%201984%2D2016&text=The%20statistic%20shows%20the%20percentage,had%20a%20computer%20at%20home

beginning of a new economy based on information technology. Many new tech companies were founded during this time. The period was also marked by low interest rates making easy capital availability for the cash burning internet companies. The craze to invest in these technology companies was so much that the investors were willing to invest in these companies at any valuations. The speculation about these internet companies gave rise to what came to be known as the "dot com bubble"[3]. During the formative years of the dot com bubble, from 1995 to 2000, the price-earnings ratio (PE ratio) of NASDAQ reached an astronomically high level of 200. This happened despite the cash burning nature of these dot com companies because every investor was keen to have a large part of their portfolio in them. In February 2000, the US Federal Reserve started raising interest rates. This led to a higher cost of capital for the internet companies. Many of these companies started facing a cash crunch. With unsustainable business models, coupled with the rising cost of capital, many of these internet companies filed for bankruptcy. The ones who survived witnessed their valuations go down drastically as investor interest moved from the technology companies to traditional albeit poorly performing companies that had stood the test of time. A large degree of consolidation happened post the dot com bubble. With a large number of internet companies going out of business, the survivors gained market share in their respective fields. Some of these surviving companies are Amazon, Netflix and Google. The individual valuation of these companies now far exceeds the combined GDP of the Balkan countries.

Back home in India, the internet revolution began much later. Internet penetration grew from 27 per cent in 2015 to 62 per cent in 2020[4], registering more than double internet penetration rate in 5 years. Thanks to the large population base, even with the penetration rate significantly lower than in the developed countries (~86 per cent), India is now the second largest online market in the world after China. The new as well as the incumbent Indian companies are factoring in digital, cloud, analytics and automation in their overall business strategies. Such a move is an outcome of realizing the value that can be unlocked from this transformation rather than it being a mere bandwagon effect. The move has garnered momentum as the world woke up to a new challenge in the year 2020 in the form of COVID-19. It is not business as

[3]Pimentel, B. (2020). The Dot-Com Bubble Burst 20 Years Ago This Month — Here's What Tech Experts Say Were the Biggest Lessons as Coronavirus Triggers Another Tech Crash, *Business Insider.* Retrieved from: https://www.businessinsider.com/dot-com-bubble-burst-20th-anniversary-experts-coronavirus-tech-crash-2020-3?IR=T

[4]Statista (2019). Number of Internet Users in India from 2015 to 2018 with a Forecast until 2023 (in millions), Survey by *Statista Digital Market Outlook,* February, 2019.Retrieved from: https://www.statista.com/statistics/255146/number-of-internet-users-in-india/

usual.

Traditionally face-to-face interaction based businesses such as banking was forced to shift to an online mode with video KYCs coming into effect. Companies that are not so agile and unprepared to face such an unprecedented scenario are struggling with their business continuity.

Value Migration

It is important at this point to discuss the concept of 'Value Migration' coined by American business consultant Adrian Slywotzky (1995). The concept explains a shift of economic value from outdated and obsolete business models to the ones with superior business designs. Value migration is a primary explanation of how the aforementioned surviving "dot com" companies created value that made them take their market capitalization to exceed the GDP of some small countries. For example, we may consider Google in the space of advertising, Amazon in retail and Netflix in video content consumption. These companies focused on what is known as the 'hassle map' in a particular industry and tried to reduce the spread of that hassle map. In addition to that, they constantly focused on emerging trends that could disrupt their business models, embraced such trends and unlocked value from them. One great example is Amazon's Kindle. Traditionally Amazon was an online bookseller. When e-book technology emerged, it posed a threat to the business that Amazon had built in about a decade's time. Amazon recognized it to be an opportunity rather than a threat. It invested to develop Kindle that changed the reading experience of the consumer, made access to the content of books almost instantaneous and reduced cost to the consumer drastically. It did not stop there. Today, Amazon is also a publisher. It focused on the hassle map of writers and the difficulties they faced to publish their content and reach their readers and came up with a mechanism to solve it. The writers can now publish their content and find their readers very easily through Amazon's website and Kindle. Amazon thus managed to disrupt the traditional ecosystem of how books were published and purchased, and in the process ended up adversely affecting their own traditional online sale of books. However, they were able to unlock value and start a new engine of growth through Kindle and Amazon Publishing. An Indian example that explains the concept would be Info Edge India. It is the parent company of websites such as Naukri.com, 99acres.com, Jeevansathi.com and Shiksha.com. It is into the business of online classified ads. The revenues of the company increased from just about ₹200 crore in 2008 to ₹1,300 crore in 2020, clocking a CAGR of 17 per cent over 12 years. It happened despite the fact that the market for classified ads did not grow at such a high rate during the same period. What happened was the value migrating from offline ads of newspaper companies to online

portals of Info Edge India. Online ads were much less expensive, highly scalable, editable and had a higher reach. This forced the newspaper companies to start migrating to online portals to remain relevant. Today a majority of the consumption of news is happening digitally through mobile phones.

The concept of value migration becomes all the more poignant in the recent times. With continuous change in the environment, the aspects of products and services that consumers ascribe value to, are constantly changing. In the recent disruption caused by COVID-19, consumers are clinging on to the trustworthy brands. In the dairy industry for example, a brand like Amul is expecting a 15-17 per cent increase in sales (Bera, 2020). This is largely due to a customer shift towards a trustworthy brand as safety is of paramount importance to consumers right now.

Interaction Effect of Digital, Cloud, Analytics and Automation

The humans now have an access to almost everything through their smartphones, from buying movie tickets, ordering food, purchasing entertainment products and services, buying groceries, finding a date or a life partner, finding a doctor, opting for a loan, to attending a course, and the list can go on. A large number of tasks can now be done digitally. All businesses are present digitally. Unlike the yesteryears, the presence of a business in the digital economy does not require a massive real estate cost. Since the businesses are present digitally, customers interact with them digitally. The digital interaction generates information that is stored in the cloud. The cloud is a massive infrastructure of interconnected servers that can provide virtually unlimited storage and computing capacities. Unlike the yesteryears, an entity does not need to spend massive amounts in technology costs to run their business because the pricing of cloud capabilities is based on pay per use.

The information generated through digital interaction gets stored in the cloud and is then analyzed using extremely sophisticated math using the computational power provided by the cloud infrastructure itself. Analytics enables identification of patterns of purchase, behaviour and preferences a lot better and, more importantly, a lot more quickly than earlier. It also helps in identifying problems that occur in the value chain. Some of these problems are frequent and can be solved in a structured manner; solutions for such problems are automated.

In addition to humans generating information through digital interaction, machines and devices generate a large amount of information as well. Such information too is stored in the cloud. Interestingly, such information can not only be used by the humans, but also by other devices and machines. The use of information generated from one machine or device by another machine or device enables machines and devices to interact with each other. This

interconnectedness of devices gives rise to the Internet of Things (IoT). An example may be useful to understand this idea. Imagine a user owns a smart coffee machine that keeps track of the number of cups of coffee it has dispensed. It also keeps track of the average daily consumption of coffee by number of cups. It is connected to the user's mobile phone. It knows that it generally takes 7-10 days for a new box of coffee beans to arrive post ordering it on Amazon. Whenever the stock of coffee beans reaches below the average level of consumption for the next 7 days, it can place an order for a new box of coffee beans on Amazon through the user's mobile phone. The new box of coffee beans is delivered just on time before the smart coffee maker has run out of all the coffee beans, all without the intervention of a human. In the process, the smart coffee maker keeps track of its inventory and is able to order for replenishment at the right time. It is two systems talking to each other, the smart coffee maker and the Amazon shopping app. This is a very naive example of how IoT functions. The idea of the smart coffee maker is widely used in the warehousing industry. The goal of the warehouse is simple. It has to stock just enough inventory based on the demand so that it does not run out of stock. Based on the inventory level of different stock keeping units (SKUs) and based on the demand forecast of each of these SKUs, a smart inventory management system can decide when and how much of which stock to order so that the storage and transport cost of the warehousing company can be optimized. The backbone of the process at a very large scale would be storage in the cloud, analytics through mathematical models and finally automation of a certain extent of the process.

Embracing the Digital, Cloud, Analytics and Automation Ecosystem

The speed of technology adoption is increasing at a very high rate. In case of the households, technology adoption can be measured as the percentage of households using a particular technology year on year. On comparing the adoption rates of older technology with that of newer technology, it could be observed that the speed of technology adoption is much higher for newer technologies than that of their older counterparts. An example is the adoption of computers vs. that of tablets. The personal computer was invented in 1974 by a firm called MITS. The technology adoption rate (Ritchie and Roser, 2017) of the personal computer was 42 per cent in 1998 and it increased to 63.10 per cent in the next five years, registering a change of 21 percentage points. The tablet, on the other hand, had a 3 per cent adoption rate in 2010 but it increased to 51 per cent in 2016 registering a 48-percentage point growth in just five years. The adoption rate of digital, cloud and analytics among companies are increasing at a very fast rate post the crisis created by COVID-19. The early adopters of these technologies found it

easy to adapt to the crisis whereas the laggards had to implement them as a survival response. A recent report by *moneycontrol.com*[5] put forth the revenue comparison of big four IT firms of India, TCS, Infosys, Wipro and HCL. The companies posted either a revenue degrowth or a very low growth in the June 2021 quarter on year on year basis.

However, all the firms reported that, though the overall growth was slow, they have gained significant traction in their digital business. Cloud providers such as Amazon Web Services and Microsoft Azure too have registered a surge in customers subscribing to their cloud services since the emergence of the pandemic. In addition to adding significantly to the value proposition of companies, these technologies are now at the heart of business continuity. A striking example is the retail business. There has been a long-standing comparison between e-commerce and brick and mortar stores. COVID-19 has forced many brick and mortar retailers to collaborate with online platforms that provide delivery to customers; some have also launched their independent delivery as well as procurement platforms.

The Ecosystem and the Pandemic

In the short run at least, e-commerce seems to be a clear winner in terms of customer convenience and preference. The pandemic has underscored the importance of efficiency for companies. Analytics and automation have helped companies in this regard. Companies that had invested heavily in analytics could easily identify opportunities to drive efficiency whereas investments in automation have paid off by helping to continue business even with reduced workforce availability. Technology is heavily intertwined across all business functions. Digital, cloud, analytics and automation help to enhance the functions such as supply chain, customer service and recruitment among others. Millions of dollars have been invested in these technologies already and more dollars are chasing them.

The pandemic has also grossly damaged jobs. The International Labour Organization (ILO) estimates that about 340 million jobs worldwide could be lost in the second half of 2020 (Seth Sharma, 2020). However, a greater threat to jobs in the long run will be automation. The combination of factors such as artificial intelligence, robotics and interaction design coupled with greater affordability is at the heart of automation that is making inroads into a large number of occupations. It is important to note that it is not only the low skilled jobs that are being threatened, but also high end jobs are at risk. Automated trucks are a reality now. The automated trucks directly affect the livelihoods of truck drivers and indirectly

[5]Moorthy, S. (2020). IT Firms Could See Brand Value Loss of Up to 20 Percent Due to COVID-19, *Moneycontrol.com.* Retrieved from: https://www.moneycontrol.com/news/business/indias-top-100-brands-tcs-infosys-hcl-retain-positions-in-top-10-wipro-slips-to-11-5336691.html

affect the livelihoods of motel owners along the highways. In the healthcare space, algorithms are now being able to compile medical transcripts through image recognition posing a huge risk to the jobs of radiologists. In the space of customer service, the introduction of chatbots have automated many regular issues, only the more complicated issues are being routed to human customer service associates for resolution. These trends will be more pronounced in the post COVID-19 world, as companies will allocate a large part of their budgets towards automation that promise long-term benefits. Such a move would have interaction effects as suggested by many economists across the globe, leading to thousands of dollars of value migration. To protect the livelihoods of people, the governments and the education systems have to step forward to overhaul the way people are imparted skills. In the current methods, more than half of the degrees and skills would be rendered redundant due to automation. If the status quo of education is maintained, it can lead to another crisis of unprecedented nature.

The Disruption and the Way Ahead

Some thinkers believe it is time for humans to focus more on emotional and psychological aspects rather than the logical and numerical ones. If true, it might open up opportunities for the Humanities stream, which has not been in as much focus as its Science, Technology, Engineering and Mathematics (STEM) counterparts. The fact that COVID-19 has caused an emotional crisis to many people leading to an increase in demand for psychotherapy and counselling is a notable data point in this regard. The future would belong to people who are able to innovate or perform tasks that are not routine in nature. It is time that countries and governments recognize such trends and take steps to empower their future generations to be able to remain relevant with their skills. The role of the government is extremely important to manage the social and economic impact of technological revolution. The government has to act on educational reforms, encouragement of innovation and technological entrepreneurship, re-skilling of the workforce.

The way of doing business is ever changing, but the current crisis has revealed a lot of what is possible through technology that had not been implemented before. The pandemic has shown the world the importance of technology; the adopters of technology have certainly fared better than the laggards. However, it seems that some of the changes that came into effect due to the virus-induced lockdown are here to stay. A prominent one is work from home. Companies suddenly discovered a dramatic way to reduce their office space cost and the cost of travel. Many companies have planned to continue working from home for roles that allow it, and conduct many business meetings virtually without travelling. The future of business travel might be bleak as a lot could be done virtually. Technologies such as augmented reality can

enable the virtual presence of a person in a meeting room in New York who might actually be speaking from Kolkata. Though it promises advantages, it can have disadvantages too. One of those is the problem in formation of social capital. Working from home would restrict the ways in which employees interact with each other resulting in little or no build-up of camaraderie between them.

Conclusion

The pace of the technological transformation is fast, and how the future is going to look like is hard to say. Nevertheless, what can be said for sure is that all these technologies are going to enable humanity to do more with fewer resources. One of such resources is also the human resources. It is for all humans to collectively bargain for their future. The continuous emergence of newer technologies can produce two types of outcomes. One is that of the utopian abundance where, the minimum basic wage is guaranteed, production is taken over by machines and the humans are freed up from monotonous work to focus on what they really enjoy doing. Second, a darker and more likely future, one in which many skills are rendered redundant, job losses are high, increased economic and social inequality is witnessed. Capitalism is what humanity had chosen several years ago as the economic system to bring about collective prosperity. Would technological prowess turn the tides against capitalism? The answer is unknown. The solution to an economic problem of such magnitude has to be a political one. However, rather than prophecy, it might be wiser to focus on enhancing the more humane sides of empathy, justice, emotion, creativity, innovation and art. In addition to the STEM disciplines, creative and emotional education could be of great value for the future humanity. It could be the right time for the resurrection of the humanities stream of learning.

References

Bera, S., (2020). How Amul Swung the Great Indian Milk Run, *Livemint*. Retrieved from: https://www.livemint.com/companies/news/how-amul-swung-the-great-indian-milk-run-11594651047495.html

Ritchie, H. & Roser, M. (2017). Technology Adoption, Published online at *OurWorldInData.org*. Retrieved from: https://ourworldindata.org/technology-adoption

Seth Sharma, Y. (2020). Global Labour Market "Uncertain", No Return to Pre-Pandemic Levels in 2020: ILO, *The Economic Times*. Retrieved from: https://economictimes.indiatimes.com/news/international/business/global-labour-market-uncertain-no-return-to-pre-pandemic-levels-in-2020-ilo/articleshow/76712702.cms

Slywotzky, A.J. (1995). Value Migration: How to Think Several Moves Ahead of the Competition (Management of Innovation and Change), *Harvard Business Review Press*

Consumerism in Times of Uncertainty: Analyzing Purchasing Behaviour during COVID-19

Tinu Jain*, Palakh Jain and Chavi Asrani*****

Abstract

The study uses the Unified Payments Interface (UPI) transactional data along with credit card and debit card transactional data to develop an understanding of the peculiar purchasing behaviour of the consumers in the Indian context. From the analysis, it is understood that consumers tend to over purchase and also display illicit hoarding behaviour during the initial stage of an uncertainty. As the lockdown extended and the pandemic kept spreading, the consumers resorted to sustainable consumption behaviour.

Introduction

Disease epidemics plague human societies in many ways apart from health issues and loss of life. COVID-19 is already seen as one of the biggest life threatening pandemics in recent times. Spread of COVID-19 has led to stringent and mass scale lockdown in various countries across the globe bringing the economies to a standstill as a large number of businesses were temporarily shutdown. These have not only affected the economy of the country but have also brought about a great amount of uncertainty among the consumer groups. From a marketing perspective, it is pertinent to study the changing consumption behaviour during the time of such an epidemic which comes with an uncertainty about the future play out and hastily altering spending patterns among the consumers.

The economy at the macro level and individual households at the micro level have both been upended to the extent which cannot be compared to any other recent setbacks or events. The entire country and majority of the industries were shutdown and the economic activities are expected to be at the all time lowest. While various government bodies and policymakers are working to minimize the economic harm and losses for individual households, small and local businesses and

*Assistant Professor (Marketing), International Management Institute, Kolkata
**Assistant Professor (Economics), Bennett University
***Ph.D. Scholar (Economics), Indian Institute of Technology, Delhi

small and medium enterprises (SMEs), they are also facing a unique problem of stock outs of essential commodities (food items including grains, pulses, vegetables, packaged food items etc.) to deal with. Apart from a huge decline in production and supply of some of the categories of these essential commodities, hoarding and stockpiling at consumer end is predicted to be a major cause for it.

The speed of economic displacement along with the irregular buying behaviour of the consumers is making credit stipulations to the businesses and fiscal incentives to the households a very difficult task for the policymakers. While there are plenty of debates on consumers overbuying and stocking consumables, very little research has been conducted to confirm the same. While there are some studies trying to predict the impact of epidemics or recession on employment and income (Baker, 2018; Mondragon, 2018; Barro *et al.*, 2020; Gossling *et al.,* 2020; Eichenbaum *et al.*, 2020; Mehta *et al.,* 2020), the exploration of consumption pattern during such emergency has been largely limited to inequality in consumption (Blundell *et al.*, 2008). The article aims to study the changes in the consumers' spending habits as a pseudo measure of understanding the consumption patterns among the Indian consumers during this critical time of the COVID-19 outbreak. Unified Payments Interface (UPI) transaction data, at an aggregate level have been analyzed to understand the impact of the pandemic on the spending habits of the Indian consumers. Further, credit card and debit card transaction data at the aggregate level have been analyzed to draw insights on the spending patterns of the consumers. The data used is taken from the Reserve Bank of India (central bank regulating the entire banking in India) which collects and monitors bank wise transaction data. This type of data helps to understand in detail the financial spending behaviour of the various consumers.

Though the data is available for consumers with at least one bank account which is estimated to be more than 80 per cent of the population aged 15 years or more[1], the same can be used to predict the spending behaviour of the rest without any bank account. The paper attempts to add to the rapidly growing body of literature studying the implications of COVID-19 on the business and economy. The next section provides an overview of the COVID-19 pandemic, followed by sections on data analysis and conclusion.

COVID-19 and Its Impact

Wuhan (China) is where COVID-19 was first recognized and reported to WHO towards the brink of breaking of the new year 2020

[1]Sanghera, T. (2018, May 17). 80% of Indians Now Have a Bank Account. So Why Is Financial Inclusion Low? *Business Standard-Finance*. Retrieved from: https://www.business-standard.com/article/finance/80-of-indians-now-have-a-bank-account-so-why-is-financial-inclusion-low-118051700150_1.html

(Gassoling *et al.* 2020). While Wuhan itself witnessed a sharp increase in the number of cases within a fortnight, the spread of the virus across various cities and even other countries was observed. The initial cases were connected to travel to/from Wuhan. Afterward, more cases were identified which were again related to travel to subsequently affected places. The strong integration and connection worldwide led to an easy spread of COVID-19 across the globe. Government bodies from various countries resorted to various measures in response starting from restricting international travel initially to domestic travel later on. Few countries had to implement nationwide lockdown to slow down the spread as a measure of control (Hongwei and Lloyd, 2020). The step had a significant impact on all the aspects of the economy of the countries across the globe affecting not only the supply chain but also the global and domestic demand for almost all the products of entire consumer industries.

India recorded its first case towards the end of January 2020 and was not spared from the rapid spread of the epidemic (Nadkarni *et al.*, 2020). The central government along with the state government bodies took precautionary steps in the form of awareness building, health preparedness and limiting travel across nations and states till the end of March 2020.

It was towards the end of March 2020, when the reported cases started surging up, though meagre in comparison to the population of the nation, that the Central Government initiated one day voluntary lockdown in form of *'Janta Curfew'* and followed by a 21 days nationwide lockdown of the world's biggest democracy. As the pandemic kept spreading its reach, the lockdowns kept extending bringing the economy to a standstill with a complete shutdown of many industries and uncertainty among the consumer groups.

The uncertainty among the consumer groups is generally measured by the disruptive buying and consumption behaviour among the consumers. In the case of lockdowns, consumers are expected to hoard food and essential items in the short run (Long and Khoi, 2020 (a), 2020 (b); Naja and Hamadeh, 2020). Consumers also tend to prioritize on the products they need to hoard in the short run and also prioritize among the products for their normal consumption (Laguna *et al.*, 2020). While the same is expected to be a normal phenomenon, hoarding data is neither available nor will the consumers end up providing honest responses in attempted survey capturing hoarding intention and behaviour (Cherrier and Ponnor, 2010; Ananza and Nowlin, 2017). Thus, transaction data, which captures the spending behaviour can be a very good proxy to measure the abnormality in purchasing behaviour (Baker *et al.*, 2020).

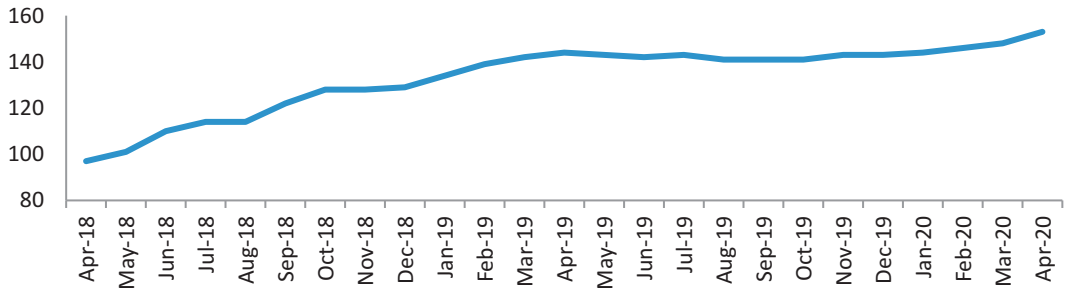
Data and Analysis

UPI transaction data along with credit card and debit card transaction data was collected from the official Reserve Bank of India (RBI)

website. UPI is defined as "an instant payment system developed by the National Payments Corporation of India (NPCI), an RBI regulated entity. UPI is built over the Immediate Payment Service (IMPS) infrastructure and allows you to instantly transfer money between any two parties' bank accounts." (*https://www. npci.org.in/*). Consumers use various forms of electronic wallets (e-wallets) to make monetary transfers to the sellers on UPI platforms (Singh *et al.*, 2020). The method is quite popular due to ease of use and also various incentives in the form of cashbacks and coupons being provided by the e-wallet service providers. The services further received the boost in India during the 2016 demonetization policy along with the promotion of digitization by the Government of India. The other means used for transaction majorly include cash or swiping of credit or debit card at Point of Sales (POS). As cash transaction is very difficult to capture, the transaction usage of debit and credit cards in Automated Teller Machines (ATMs) to withdraw cash can be used as a dummy for cash transactions. The article majorly focuses on the UPI transactional data month wise (at an aggregate level) as the same is for immediate transfer against the transaction while cash withdrawn from the bank may also be used for hoarding for emergency usage. The RBI provides aggregate transaction data for entire organized Indian banking. UPI transaction data for a period over 2 years starting from April 2018 to April 2020 has been used for the analysis. For further analysis, credit card and debit card usage data for both POS and ATM has been collected for the period of July 2019 to May 2020 (both the months included). Credit card and debit card data have been captured, after witnessing a peculiarity in the spending behaviour from the initial scanning of the UPI transactional data, to check if there were some compensatory measures being deployed through the other means of payment for the transactions.

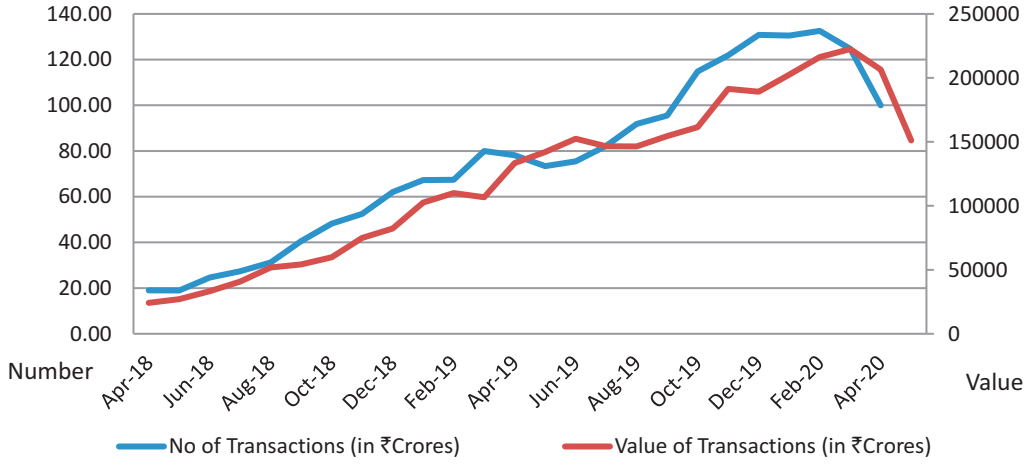
Figures 1 to 3 depict the various statistics related to UPI transaction data in graphical form. It is very clear from Figure 1 that the

Figure1: Number of Banks Live on UPI



Source: https://www.rbi.org.in/

Figure 2: Transaction (in ₹Crores) from UPI Platform

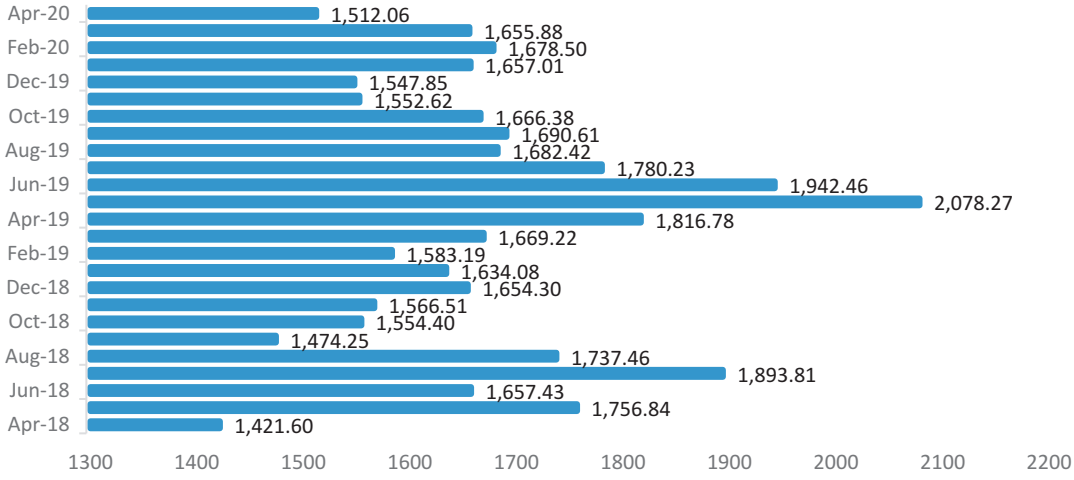


Source: https://www.rbi.org.in/

acceptance of UPI is on the rise as the number of banks live on the UPI platform is on the rise over the period of 2 years. While a similar trend was observed in the number of transactions (Figure 2) for a major part of the duration of the sample period, an interesting observation points to the sudden dip in the number of transactions from March 2020 onward. March 2020 was the time when the lockdown was imposed in India. A very similar trend is observed in the total value for the UPI transactions made during the same period (Figure 2). Thus the acceptance of UPI as a payment option was on the rise till the pandemic struck in India. The lower level of transactions during the pandemic may be attributed to the lower number of outings where the consumer used UPI for payment of cab ride rentals and other bills (for instance restaurant bills in case of dining outs). For further insights, the amount per transaction was calculated (depicted in Figure 3) using the gross amount of transactions and the number of transactions using the UPI platform. The fluctuations observed may be attributed to seasonality and festivity seasons, but while the trend of the amount spent per transaction was on the rise, it can be clearly marked that there was a dip in the amount per transaction for the period marred by COVID-19 especially during the lockdown, as compared to the same period in the previous year.

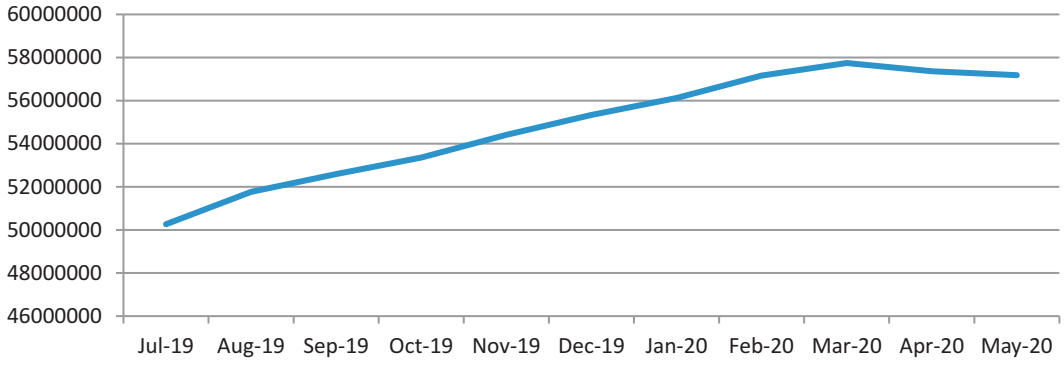
While it was observed that the consumer can be skeptical and might be restricting their consumption, it became all the more important to analyze the data of other means of payments, especially for the second half of the duration. Credit and debit card transactional data were analyzed for further

Figure 3: Amount Spent per Transaction (in ₹Crores) from UPI Platform



Source: https://www.rbi.org.in/

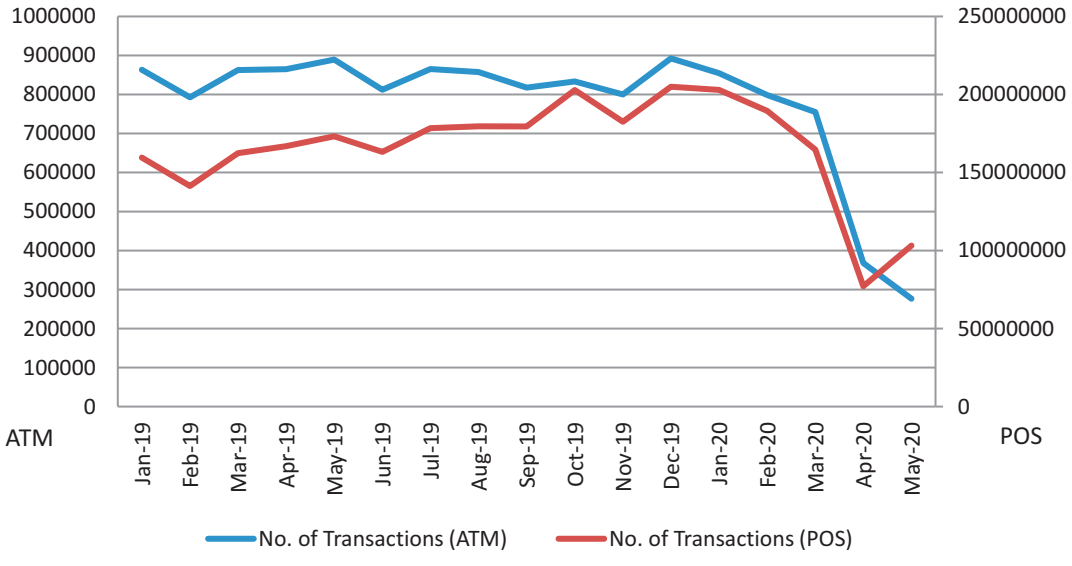
Figure 4: Number of Credit Cards



Source: https://www.rbi.org.in/

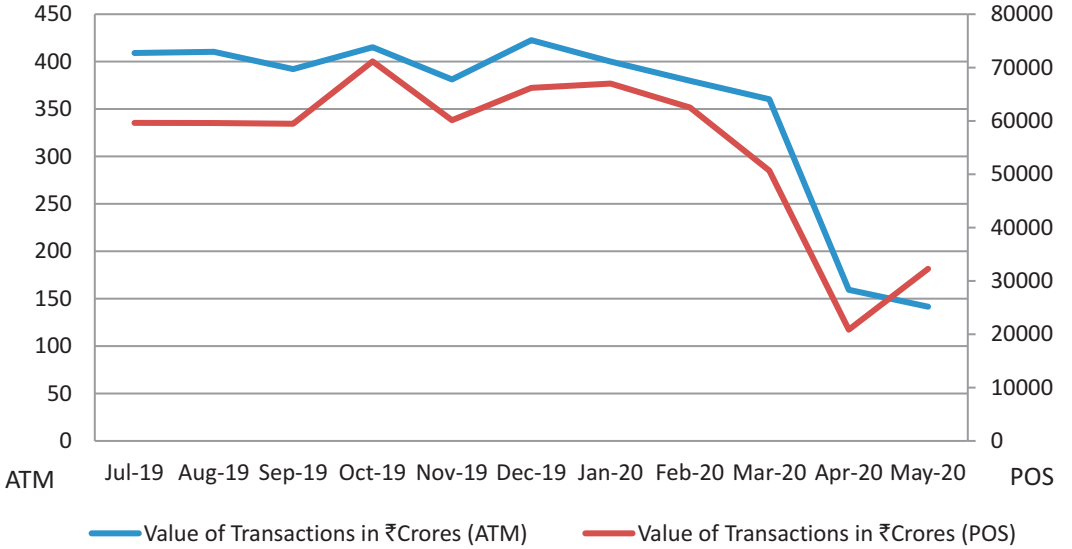
insights and confirmation. Figures 4 to 7 depict the various statistics of transactional data for credit cards in graphical forms. From figure 4 it is very clear that there was a drop in the number of credit cards used post the lockdown (March 2020 onward). Figure 5 also makes it clear that the number of transactions at the ATM and POS had gone down during the lockdown though a positive trend is seen in the case of POS transactions towards May 2020 which indicates some form of recovery. Figure 6 shows that the gross value of

Figure 5: Transaction at ATM and POS Using Credit Cards



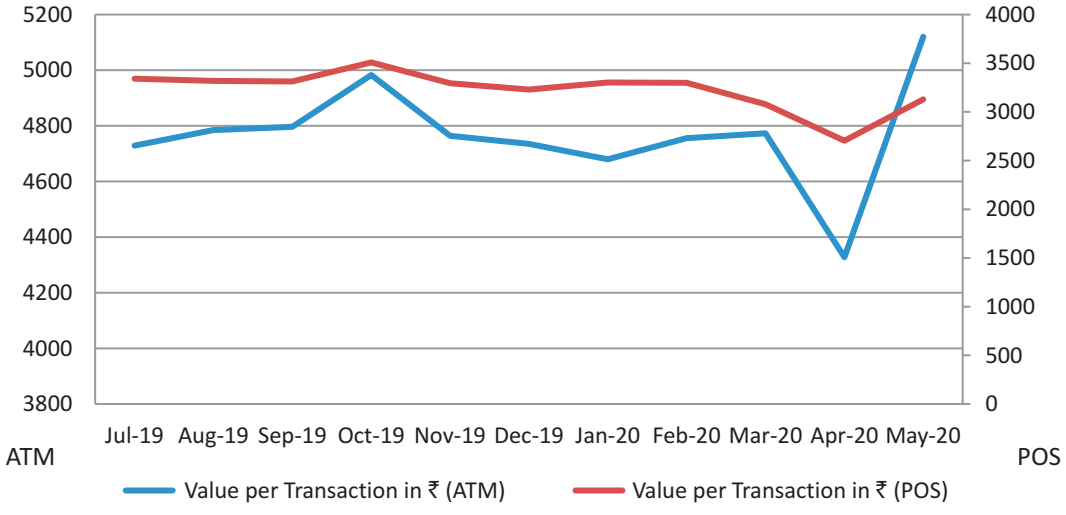
Source: https://www.rbi.org.in/

Figure 6: Value of Transaction at ATM and POS Using Credit Cards



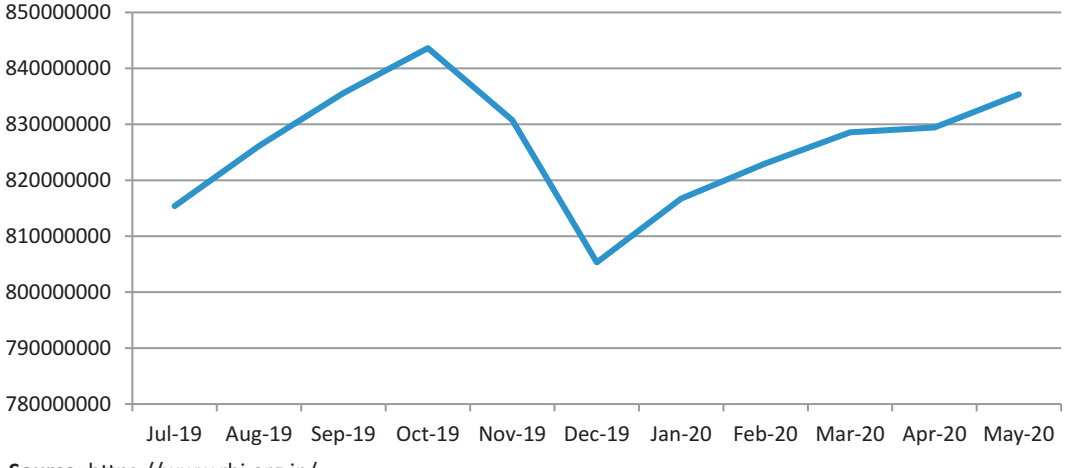
Source: https://www.rbi.org.in/

Figure 7: Value per Transaction at ATM and POS Using Credit Cards



Source: https://www.rbi.org.in/

Figure 8: Number of Debit Cards



Source: https://www.rbi.org.in/

transactions at ATM and POS using the credit cards had also gone down during the lock down period with some recovery towards May 2020 for the gross amount at POS. Figure 7 provides the amount per transaction for ATM and POS for credit cards. A very similar trend is observed in these figures with a dip in value per transaction during the

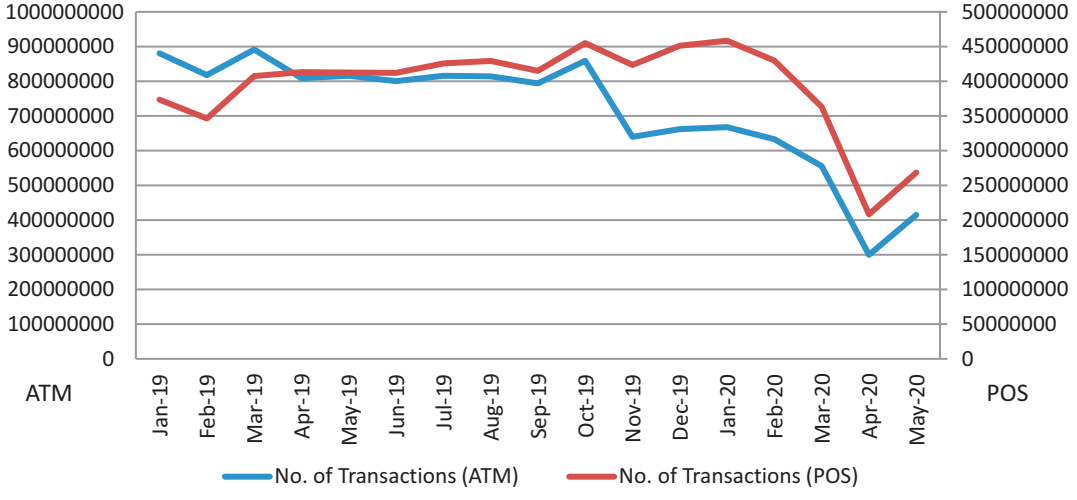
lockdown and some recovery in May 2020.

Transactional Data for debit cards show almost similar trends except for the number of debit cards constantly going up. Figures 8 to 11 depict the various statistics of transactional data for debit cards in graphical forms. While from figure 8 it is very clear that the number of debit cards had gone up even during the pandemic, figure 9 shows that the number of transactions at the ATM and POS had gone down during the lockdown with some recovery in May 2020. Figure 10 shows that the gross value of transactions at ATM and POS had also gone down during the lockdown period with some recovery towards May 2020 in contrast to the transaction data of credit cards. Figure 11 provides the amount per transaction for ATM and POS for debit cards. A very similar trend is observed for the debit cards, with a dip in value per transaction during lockdown and some recovery in May 2020.

Conclusion

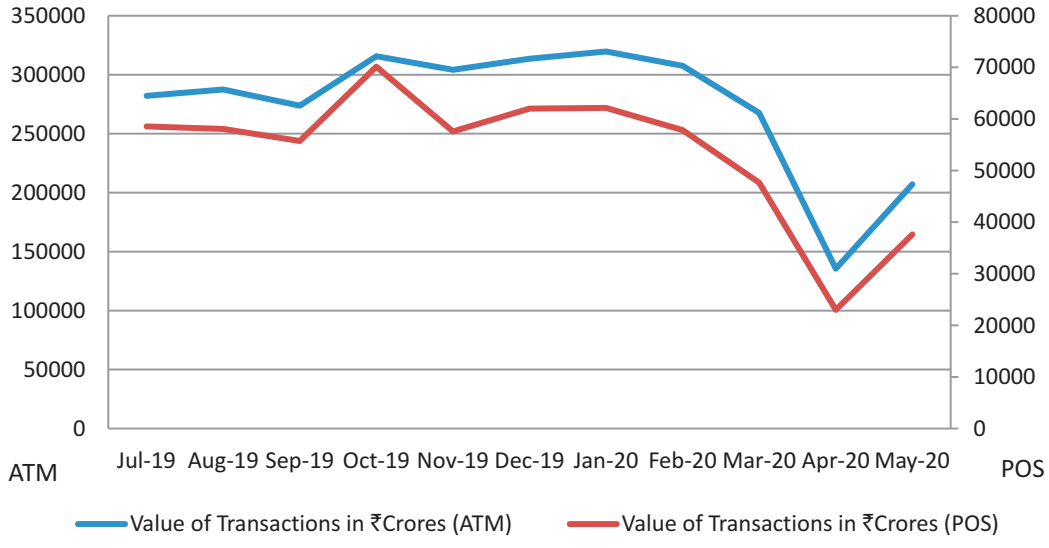
The study attempts to provide an insight and understanding about the spending peculiarity of the consumers during the crisis which in this case is the pandemic COVID-19. Transactional data has been used to develop a perspective of and insights into the purchasing patterns of the consumers during the times of uncertainty. The results from the observations are in the line of the previous studies (Cherrier and Ponnor, 2010; Anaza and Nowlin, 2017; Long and Khoi, 2020 (a) & (b)) that speak of consumers tempted to buy extra as a reserve for the future ambiguity which is also referred

Figure 9: Transaction at ATM and POS Using Debit Cards



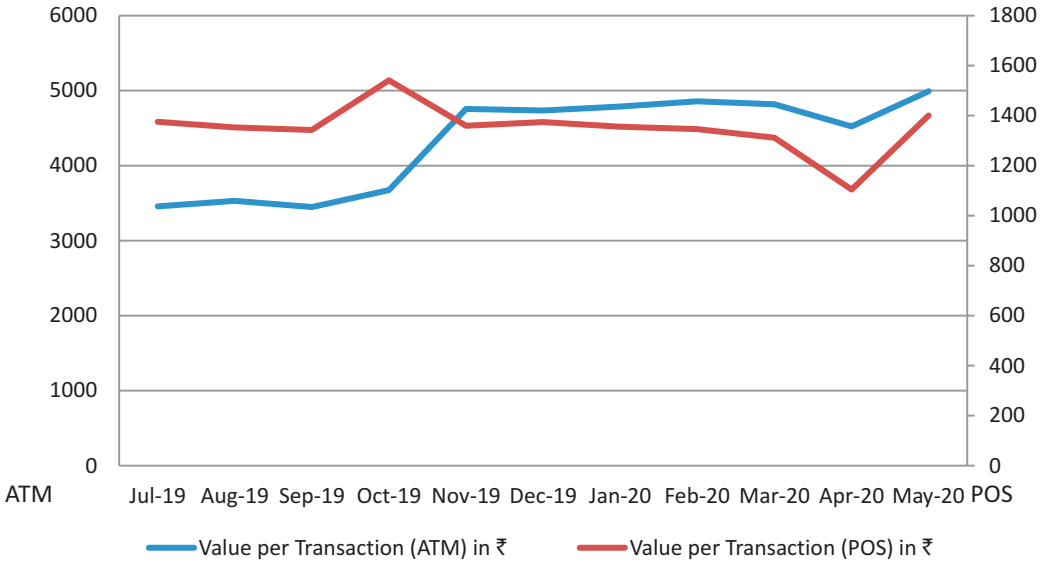
Source: https://www.rbi.org.in/

Figure 10: Value of Transaction at ATM and POS Using Debit Cards



Source: https://www.rbi.org.in/

Figure 11: Value per Transaction at ATM and POS Using Debit Cards



Source: https://www.rbi.org.in/

to as hoarding in extant literature. The UPI transactional data clearly indicates that during the very initial days of the COIVD-19 pandemic and the imposition of the lockdown, there was a rise in the number of transactions along with the amount per transaction. It may be estimated that consumers were piling up stocks of food and essential products. As the lockdown extended, and the pandemic kept spreading, with time, the consumers started using the hoarded stock and were thus involved with lesser transactions during April 2020. As the stocks depleted, the consumers were back to the market for getting access to fresh stock and thus May 2020 saw some sort of recovery in the form of transactional data. The recovery not matching the same levels may be attributed to the conscious and sustainable consumption pattern where consumers prioritize the products and try to limit the consumption of lesser prioritized and impulsive category (Laguna *et al.*, 2020). Future researchers can look into retail sales data to understand the impact of COVID-19 on category wise products. This would add on further to the growing literature on COVID-19 and its impact on the economy and market place. As there are loads of reports stating that there has been a rise in unemployment and salary cuts, further study can be conducted as both can be a mediating variable if not the major cause for the change in purchasing behaviour among the consumers.

References

Anaza, N. A. and Nowlin, E. L. (2017). What's Mine Is Mine: A Study of Salesperson Knowledge Withholding & Hoarding Behavior. *Industrial Marketing Management*, *64*, 14-24.

Baker, S. R. (2018). Debt and the Response to Household Income Shocks: Validation and Application of Linked Financial Account Data. *Journal of Political Economy*, *126*(4), 1504-1557.

Baker, S. R., Farrokhnia, R. A., Meyer, S., Pagel, M. and Yannelis, C. (2020). How Does Household Spending Respond to an Epidemic? Consumption During the 2020 Covid-19 Pandemic (No. w26949). *National Bureau of Economic Research*.

Barro, R. J., Ursua, J. F. and Weng, J. (2020). The Coronavirus and the Great Influenza Epidemic: Lessons from the "Spanish Flu" for the Coronavirus' Potential Effects on Mortality and Economic Activity. *NBER Working Paper*, *26866*.

Blundell, R., Pistaferri, L. and Preston, I. (2008). Consumption Inequality and Partial Insurance. *American Economic Review*, *98*(5), 1887-1921.

Cherrier, H. and Ponnor, T. (2010). A Study of Hoarding Behavior and Attachment to Material Possessions. *Qualitative Market Research: An International Journal*, 13(1), 8-23.

Eichenbaum, M. S., Rebelo, S. and Trabandt, M. (2020). The Macroeconomics of Epidemics (No. w26882). *National Bureau of Economic Research.*

Gössling, S., Scott, D. and Hall, C. M. (2020). Pandemics, Tourism and Global Change: A Rapid Assessment of COVID-19. *Journal of Sustainable Tourism*, 1-20.

Hongwei, H. and Lloyd, H. (2020). The Impact of Covid-19 Pandemic on Corporate Social Responsibility and Marketing Philosophy. *Journal of Business Research,* 116 (2020); 176-182.

Laguna, L., Fiszman, S., Puerta, P., Chaya, C. and Tárrega, A. (2020). The Impact of COVID-19 Lockdown on Food Priorities. Results from a Preliminary Study Using Social Media and an Online Survey with Spanish Consumers. *Food Quality and Preference*, 104028.

Long, N. N. and Khoi, B. H. (2020) (a). An Empirical Study About the Intention to Hoard Food During COVID-19 Pandemic. *EURASIA Journal of Mathematics, Science and Technology Education*, 16(7), em1857.

Long, N. N. and Khoi, B. H. (2020) (b). Covid-19 Risk Perception and Food Hoarding Intention: Evidence from Vietnam. *Journal of Critical Reviews*, 7(18), 1781-1790.

Mehta, S., Saxena, T. and Purohit, N. (2020). The New Consumer Behaviour Paradigm amid COVID-19: Permanent or Transient?. *Journal of Health Management*, 0972063420940834.

Mondragon, J. (2018). Household Credit and Employment in the Great Recession. *Kilts Center for Marketing at Chicago Booth–Nielsen Dataset Paper Series*, 1-025.

Nadkarni, A., Kapoor, A. and Pathare, S. (2020). COVID-19 and Forced Alcohol Abstinence in India: The Dilemmas Around Ethics and Rights. *International Journal of Law and Psychiatry*, 101579.

Naja, F. and Hamadeh, R. (2020). Nutrition amid the COVID-19 Pandemic: A Multi-Level Framework for Action. *European Journal of Clinical Nutrition*, 1-5.

Singh, N., Sinha, N. and Liébana-Cabanillas, F. J. (2020). Determining Factors in the Adoption and Recommendation of Mobile Wallet Services in India: Analysis of the Effect of Innovativeness, Stress to Use and Social Influence. *International Journal of Information Management*, 50, 191-205.

On the New HR Norms during COVID-19

Jyotirmoy Bhattacharya*

Jyotirmoy Bhattacharya is a strategic human resource leader having close to two decades of industry experience. He is also a life and business coach and a lead assessor in the Confederation of Indian Industry. His stints in design and execution of organizational restructuring have been published as Harvard cases. In his conversation with IMI Konnect, Bhattacharya candidly shares some of his personal views on the impact of the pandemic on Human Resource Management.

IMI Konnect: *We are now living in a time when every organization has to re-align their business processes to deal with the prevailing disruptions owing to the COVID-19 pandemic. Let us start with the new reality of work-from-home mode. Is this mode equally productive?*

JB: The concept of Work from Home (WFH) is not new. It was already being used for over a decade by many IT companies within and outside India. But, currently WFH had to be strategically adopted by the employers for survival. The option thus became available for even employees working in non-IT domains, even in the small enterprises. Thus, the concept has become an integral part of the economy in most of the nations across the globe. However, it goes without saying that WFH has gained popularity in the short term due to the COVID-19 crisis. We can consider this time for a pilot study and wherever it yields better productivity, we can ensure its continuity.

According to one study from Business News Daily, remote employees work 1.4 more days per month than their office-based counterparts, resulting in more than three additional weeks of work per year. So I don't find reasons why it cannot be productive in areas where it is already being implemented.

IMI Konnect: *Do you think remote work can become a permanent trend in the long run?*

JB: Current WFH is due to lockdown and mostly to ensure employee safety. However, when the pandemic is over which is expected to be approaching fast due to the ongoing research for a vaccine, the situation should be reassessed to create a model that delivers more productivity at lesser cost while taking best care of employee needs.

There are quite a number of advantages that organizations can seek from the WFH model. However, the assessments need to involve both the pros and cons. While overhead costs

*Business HR Head, Mahindra Finance
Opinions are personal.

are expected to go down drastically, the risk involving leakage of valuable client data can lead to litigations, tarnishing of the brand image and even closure of businesses.

Hence, as I already mentioned, organizations need to evaluate the pros and cons and then decide regarding the sustainability of this model in the long run.

IMI Konnect: *The most severe outcome of the pandemic has been massive job loss. Do you think organizations could have thought out of the box to deal with their business losses without affecting livelihoods?*

JB: Definitely there have been huge job losses in the country and all over the world as businesses had to shut down operations to deal with the pandemic. According to me, headcount reduction is very easy to implement to deal with a crisis like this. But the challenge is how you ensure *physiological safety*. This pandemic has taught us how we need to ensure reserve and surplus during good times and innovative solutions at the organisation level with better and effective operating cost.

I feel there could have been alternatives to job cuts. In times of crisis, the leaders need to demonstrate compassion. Employees usually respond and understand organisational crisis. So, for example, retrenchment may be substituted by mandatory leave and so on.

It is when times are conducive that the organizations need to plan for such future crisis, or it will be hit by situations like the one we are facing currently.

IMI Konnect: *What are the kinds of challenges social distancing would impose on HR? How are businesses planning to overcome that?*

JB: Social distancing has imposed quite a number of challenges on the HR community. The foremost being the concern with the well-being and mental status of their employees. Human beings are social animals and are known to socialise and interact. Within an office framework, face-to-face interactions help in identifying the vibes from the employees easily and thereby they may be counselled to reduce anxiety related to uncertainties. Due to the pandemic the channels of interaction have changed considerably. The HR now mostly interacts with the employees remotely. I feel that social distancing measures are affecting the ability to serve the customers both internal and external. While external customer satisfaction could affect some of the walk-in customer-based businesses terribly like travel and tourism, restaurants etc., mental health of the internal customers are posing a big challenge for the HR especially with the existing daunting feeling related to an uncertain future.

Other challenges involve providing employees with the right infrastructural support to work remotely, keeping a track of employee performance. In this context, it is important to examine the impact on the business' *value chain*. If social distancing remains prolonged, we have to readjust the parameters and recalibrate. We can resolve this issue by identifying alternative solutions.

IMI Konnect: *What are the new challenges posed to an HR professional by the pandemic?*

JB: The pandemic has caused tremendous disruption in lives and in business and human resources shall be the key to supporting and catalysing changes in the workplace. Managing employee wellbeing and employee experience shall be a very important challenge to deal with during the pandemic. HR must prepare for any health-related emergencies and install preventive measures for the future. Lot would depend on ensuring physiological safety of all the employees.

Has Corporate Expectations from the Management Graduates Changed during COVID-19?

Dhritiman Sengupta*

In these pandemic times, instead of following the normal route of thinking, a processed, scientific and structured way of thinking can help to accept the ensuing changes, retain optimism, find positivity and control the controllable. So, there may be reasons to thank COVID-19. First, the work-life balance of employees have improved. They can now find mental solace by working from home in the presence of their family and yet deliver 100 per cent efficiency. Also, the world has become borderless as the location of an employee is no longer a constraint as all are connected over the web. Finally, the rate of digital transformation, which had already started way back, has gone up significantly post COVID-19 as businesses were forced to adapt to online platforms for survival. This in turn made the processes more agile.

In this backdrop, the management graduates need to realize that they need to retain an analytical approach, open-mindedness, readiness to adapt to changes by learning and unlearning new things, keep an eye on the ongoing changes and how the same impacts the customers/consumers. This can help them to attain the industry expectations. In the present context, the concept of 'out-of-the-box thinking' has become irrelevant as the 'box', or predefined parameters of confining the thoughts, are no longer valid. Today, concepts like the 'red ocean strategy' have gained relevance. The industry is expected to focus on customer centricity, customer experience, analyze consumer behaviour patterns and even go a step ahead to influence the consumer thought process to retain or build on their customer base.

In this context, the industry expects that future management graduates should be skilled in using the social media platforms. The sales efforts also need to go up by four times. The sectors that are expected to generate more jobs are Pharma, FMCG, consumer durables – in essence, any industry that enables digitization. Artificial Intelligence (AI), Machine Learning (ML) and Data Science could all be subjects of relevance as they help in understanding consumer behaviour. India is expected to become the second largest supplier of life-saving drugs with an upcoming need of 2.2 crore employees by 2021, as per a study by McKinsey.

*National Head - CPE (Key Accounts), Randstad India (P) Ltd.

Saptarshi Bhattacharya**

Although there have been many upsetting events in the recent past, the foremost being COVID-19 and the one more devastating being the Cyclone *Amphan*, there have also been reasons to see light. We now have the 'new normal' online lifestyle with employees working from home, household groceries being delivered at the doorstep, and students attending online classes. Though the students might be missing the face-to-face interactions with their classmates and professors, the good thing is that the online interactions are equipping them with adequate skills for their future endeavours. This is also one time that can be useful in building rapport and networks with the Alumni of their respective institutions. The online platforms are places that are supportive of both formal and informal interactions that can help them in building their own networks.

Considering the insurance sector, we find that this is still one of the least-penetrated sectors. While the applications for General Insurance are still received from customers (willingly or under procedural pressures) while buying vehicles, building factories and offices, applications for life and health insurance are still low. Especially the health insurance sector is the one that is least-penetrated. However, in the recent pandemic times, there has been a surge in health insurance policy applications. Moreover, while claims that were once soaring due to accidents had drastically come down owing to the lockdown, *Amphan* had been a dampener and had again resulted in raising the number of claims across the entire nation. However, having said that, the insurance sector experienced a sort of positive impact in this pandemic situation, it is also suggested to the management graduates that they must not get inclined to any particular sector for employment. The industry would expect the graduates to stay flexible and be bereft of pre-conceived location and sector preferences.

I must add that management students are expected to keep themselves updated in terms of knowledge and skills to remain employable. The pandemic has made various online courses accessible and affordable and the students must avail the opportunities to build on their skillset to remain a strong contender in the job market. Reading daily newspapers would enable them to remain aware of the ongoing changes in the industry and prepare them well for not just facing an interview but even to sustain their job in the long term. Additionally, the management graduates would become aware of the evolving expectations of the industry in terms of skill set, attitude and core competencies.

**Head HR Shared Services, Bajaj Allianz General Insurance Co. Ltd.

International Management Institute Kolkata
2/4C, Judges Court Road
Alipore, Kolkata 700027
Telephone: +91 33 6652 9664
website: www.imi-k.edu.in