

Competition and Regulation in India 2019

Digital Economy – Hitting the reset
button on competition
and regulatory governance

Edited by
Udai S Mehta & Ujjwal Kumar

CUTS[®]
International

circ
Enhancing Knowledge
Strengthening Capacity

#2002

Competition and Regulation in India, 2019

Digital Economy – Hitting the reset button on
competition and regulatory governance

Competition and Regulation in India, 2019

Digital Economy – Hitting the reset button
on competition and regulatory governance

Published by:



&



Consumer Unity & Trust Society
D-217, Bhaskar Marg, Bani Park,
Jaipur 302 016, India
Ph: +91.141.2282821
Fax: +91.141.2282485
Email: cuts@cuts.org
Website: www.cuts-international.org

CUTS offices also at Kolkata, Chittorgarh and New
Delhi (India); Lusaka (Zambia); Nairobi (Kenya);
Accra (Ghana); Hanoi (Vietnam); Geneva (Switzerland);
and Washington DC (USA)

**CUTS Institute for Regulation &
Competition**

1A, First Floor, Khehar Singh
Estate, Saidulajab
New Delhi 110 030, India
Ph: +91.11.40197995
Email: circ@circ.in
Website: www.circ.in

Edited by:

Udai S Mehta, Deputy Executive Director, CUTS International
Ujjwal Kumar, Policy Analyst, CUTS International

Citation:

**Mehta, Udai S and Ujjwal Kumar (Eds.) (2020), Competition and Regulation in India, 2019
CUTS, Jaipur**

Printed by:

M.S. Printer, Jaipur

ISBN: 978-81-8257-281-2

© CUTS, 2020

*Any reproduction in full or part must indicate the title of the Report, name of the publisher as the
copyright owner, and a copy of such publication may please be sent to the publisher.*

Contents

Foreword	i
Preface	iii
Editor's Note	v
Abbreviations	vii
Chapter 1: An Overview	1
India's Present Macroeconomic Status	1
Need for National Competition Policy	2
Competition Distortions: Decadal Picture through CDD	4
Digitalisation of Economy – An Opportunity	9
Conclusion	12
Chapter 2: Perception and Awareness Reporting	14
Introduction	14
Data and Survey Design	14
Composition of Stakeholders	14
Analysis of Survey Findings/Results	15
Conclusion	27
Chapter 3: Antitrust in the Digital Era:	
Rethinking Dominance and its Abuse	28
Introduction	28
Competition, Dominance, and Market Power in Antitrust Analysis: Implications for the Digital Era	32
The Digital Era and its Challenges for Antitrust Analysis	34
Antitrust and Dominance in the Digital Era: India's Early Experience	38
Dominance in the Digital Era: Time and Reasons to Rethink	40
Conclusion	44

Chapter 4:	Buyer Power, Competition Law and Platforms	57
	Introduction	57
	Buyer Power	59
	Competition Law and Buyer Power	62
	Digital Markets and Buyer Power	65
	Buyer Power and India	66
	Conclusion	69
Chapter 5:	Personal Data and Consumer Welfare in the Digital Economy	74
	Introduction	74
	The Economics of Consumer Welfare and Data Privacy ...	76
	Laws Relating to Consumer Welfare	81
	Personal Data, Competition and Consumer Protection	83
	Conclusion	87
Chapter 6:	Contemporary Regulatory and Competition Concerns for E-commerce in India	94
	Background	94
	Regulatory Concerns	96
	Competition Concerns in e-Commerce	98
	Conclusion	105
	Annexure: 6.1 Salient Features of existing/upcoming laws/policies related with e-commerce	107
Chapter 7:	Challenges Associated with the Market Definition Process on E-commerce Platforms: Why Bother with a Market Definition?	118
	Introduction	118
	Market Definition in Multi-sided Markets	119
	The Applicability of Traditional Tools to Multi-sided Markets	121
	How to Define Markets in Multi-sided Markets	121
	The Necessity of a Market Definition: A Search for an Alternative	125
	Conclusion	128

Chapter 8:	Regulatory Framework for the National AI Marketplace	131
	Introduction	131
	Government Initiatives on AI	134
	National AI Marketplace	136
	Characteristics of NAIM.....	137
	NAIM as a Multi-Sided Market	138
	FAIR Usage Principles	140
	Trustworthy Guidelines	143
	Legal Compliance	146
	Conclusion	146
 Chapter 9:	 Relevant Market and Market Power in Ride Sharing Industry	 149
	Introduction	149
	Ride Sharing Service.....	150
	Defining Relevant Market	153
	Assessment of Dominance/Market Power	158
	Conclusion	160
 Chapter 10:	 Epilogue	 167
	Regulatory Mechanism	170
	Conclusion and the Way Forward	171

List of Figures and Tables

Figures

1.1:	GDP Growth in the Last Five Years	1
1.2:	How Competition Policy Induce Economic Growth	3
2.1:	Composition of Stakeholders	15
2.2:	Availability of Choices in Various Products.....	16
2.3:	Comparison of Perception in Choices in FMCGs 2017-2019.....	16
2.4:	Ease of Getting Essential Services/Utilities	17
2.5:	Ease in Getting Services in 2019 with Respect to 2017.....	18
2.6:	Assessment of Quality of Services	19
2.7:	Comparison in Perception of Quality of Services 2017-2019	19
2.8:	Promotional Schemes for Various Consumer Products	20
2.9:	Perceptions on Prevalent Tied Selling Practices: Effective Way to Ensure Quality	20
2.10:	Impact of GST on Prices	21
2.11:	Purpose of Competition Commission of India	22
2.12:	Quality of Regulation in India	24
2.13:	View on Government Controlling the Price of All Essential Drugs to Ensure Affordability and Access	24
2.14:	Should Government Fix Prices for Essential Commodities to Protect Consumers?.....	25
2.15:	View on Government Giving Purchase Preference to Public Sector Units in Government Procurement (to ensure PSUs viability in the long run)	26
3.1:	The Digital World in 60 Seconds	29
3.2:	The March of the Tech Titans	30
3.3:	Rising Revenues for the Big Five, 2002-2017.....	31

8.1: Schematics of National AI Marketplace 136

8.2: Technical Architecture of NAIM 137

8.3: Characteristics of NAIM 138

8.4: Key Principles of Trustworthy AI and
Autonomous Systems 143

8.5: Indicative List of Legal and Regulations for Compliance 145

Table

8.1: Different Areas of AI 132

Foreword

The India Competition and Regulation Report (ICRR) series is a flagship biennial publication of CUTS and CIRC, presenting a compendium of policy-relevant research on the status of competition and regulation in India spanning across sectors and cross-cutting contemporary issues. This Report is the seventh in a series of biennial reports of 2007, 2009, 2011, 2013, 2015, 2017 and now 2019. As the theme – Digital Economy: Hitting the reset button on competition and regulatory governance – suggests, this volume is dedicated to competition and regulatory nuances for the fast digitalising economy.

Digital markets have some unique characteristics, such as multi-sidedness, economies of scale and scope, network effects, winner-takes-most, accumulation of big data, global reach, etc., which distinguish them from traditional markets. Digitisation of markets has brought about huge benefits in terms of efficiency, novel products and services, wider choices, greater outreach etc. At the same time, concerns have also been raised emanating out of risk of undesirable concentration. Today, when many economies are facing some adverse economic trends, such as slowing productivity, low growth, wage stagnation and increasing economic inequality, scepticism with tech platforms is growing and it is perceived that digitalisation of economies is exacerbating such trends.

From a competition law perspective, the two questions that assume importance here are – Whether the existing laws are adequate to deal with the challenges offered by these digital markets? and What should be the approach and parameters of competition analysis?

Many India Centric insights have emanated *inter-alia* from the report by the Competition Law Review Committee (CLRC) and the Market Study on E-commerce in India initiated by Competition Commission of India (CCI). The CLRC largely found the provisions of the present law sufficient to deal with competition concerns in the digital economy. However, with a view to making it further equipped to meet the current challenges, it has suggested certain additional provisions. An amendment to the Combination threshold provision, which is currently based on assets and turnover, was suggested – to incorporate an enabling provision empowering the government to introduce necessary thresholds including a ‘deal value threshold’ for notification.

Further, in the interest of speedier resolution of cases, which is particularly critical in the context of fast-changing digital markets, the Committee has recommended additional enforcement mechanisms in the form of Settlement and Commitment.

The Market Study on E-commerce in India was initiated with a view to better understand the functioning of e-commerce in India and its implications for markets and competition. Major issues that the study uncovers include compromise of platform neutrality, opacity in search ranking, lopsided contract terms between platforms and businesses, exclusive agreements and deep discounts. The bargaining power imbalance and information asymmetry between platforms and their business users seem to be at the core of such issues that have come up in the market study.

Given the complexities of the new age markets, the approach to deal with the issues has to be nuanced and cautious so as to ensure that the markets remain competitive without chilling the incentives to innovate.

In the aforesaid background, I am delighted that CUTS & CIRC have brought out this compendium of competition and regulation on the emerging digital economy in India. The ICRR 2019 presents valuable insights on some very interesting topics, which include: dominance and its abuse in the digital era; 'buyers power' in monopsony markets; personal data and consumer welfare; market definitions in the digital economy; regulatory and competition concerns in e-commerce; and regulatory framework for AI marketplace.

I hope this volume will enrich the ongoing national debate on various regulatory and competition issues of the new economy and guide the way forward.

New Delhi
January 2020

Ashok Kumar Gupta
Chairperson, Competition Commission of India

Preface

Today Indian economy is not in a good shape, casting a shadow on the national aspiration of becoming a US\$5tn economy by 2024-25. Most experts are suggesting structural reforms for bringing back vibrancy in the economy. Though there is not much clarity on the contours of such reforms, many feel that increasing the income of the lower strata of society in order to increase demand in the economy is a better way to go.

We have the example of 1991 when the economic crisis was turned into an opportunity to introduce a new economic policy that included structural reforms. Then the thrust was to create a more competitive environment in the economy by removing barriers to entry and restrictions on the growth of firms. The result was much-improved productivity and efficiency in our economy. The average GDP of around seven percent for the next two decades was quite healthy, which, in turn, resulted in significant poverty reduction.

Thus, we can say that the present economic slowdown also presents an opportunity for economic course correction by introducing reforms, even though the causes of the present economic slowdown may not be same as that of the 1991 crisis. Furthermore, the changing forms of the market due to the digitalisation of the economy also demands the need to revisit the economic policy and regulatory structure. In other words, whatever be the contours of reforms, it must take into account the distinctive features of the emerging digital (gig) economy so that equity and efficiency must be weaved together to provide an acceptable pattern of development.

The present volume of the India Competition and Regulation Report (i.e. ICRR 2019), which is dedicated to the digital economy, provides some useful regulatory insights that can be input for shaping the future reform agenda. CUTS and CIRC have been publishing ICRR every second year since 2007 and I have been closely involved in the process of their preparation.

The ICRR 2019, which is seventh in the series, contains in total 10 chapters, including three standard chapters since the series began – ‘an overview’ in its first chapter, ‘perception survey about regulation and competition scenario in the country’ in the second chapter, and an ‘epilogue’ presenting the way forward as the last chapter. The rest seven chapters (three to nine) are substantive chapters contributed by domain experts based on the call-for-paper basis.

The first of the substantive chapters (i.e. Chapter 3) examines the growth of the digital economy and its corporate titans—globally and in India—and evaluates the implications of that growth and dominance for antitrust analysis. It flags the challenges to the consumer welfare standard in the antitrust analysis and the importance of data availability across the economic sphere. The next chapter deals with competition concerns in monopsony markets that may tend to reduce the price paid to suppliers and to restrict the amount that is bought and analyses buyer power and its effect on consumer welfare, as well as the interface between competition law and buyer power.

There is a chapter devoted to personal data and consumer welfare in the digital economy, spanning across the fields of competition, consumer protection and data protection laws. Despite their differences in scope and design these regimes would interact with one another to achieve consumer welfare, which is a challenge. Similarly, in the background of current agitation by online and offline traders against the big e-commerce platforms, there is a chapter that throws light on the contemporary regulatory and competition concerns for e-commerce. It argues that both *ex-ante* regulation and *ex-post* case-by-case competition enforcement in dealing with such concerns, where the adoption of a National Competition Policy would be very helpful.

Further, there are chapters devoted to definition of the relevant market under competition law in the digital economy, in particular, that related to e-commerce and taxi aggregation. It shows that traditional tools may not lead to the right determination of the market, which, in turn, could give flawed outcomes on competition assessment. There is also a chapter on the regulatory framework for the artificial intelligence marketplace that provides contours of possible guidelines for platforms, and indicative policy and regulatory framework for addressing privacy, security, ethics and quality of data in the platform.

ICRRs have been raising burning issues concerned with competition and regulatory environment in India. I hope that ICRR 2019, like earlier volumes, will stimulate public debate and help influence requisite reforms, which in turn would result in sustainable and inclusive growth in India.

New Delhi
January 2020

Nitin Desai
Former Under Secretary,
United Nations (UN) &
President, Governing Council
CUTS Institute for Regulation & Competition

Editor's Note

Crafting newer and optimal regulatory tools for new economy...

World over there is a growing trend in economic concentration, which is being further fuelled by the deepening of the digital economy with its 'winner-takes-most' characteristics. The side effects of this growing concentration on jobs and income of the people is resulting in widening inequality within and across countries. In general, there seems to be erosion of public trust in the regulatory and competition regimes as well in the globalisation process. This is more or less a global phenomenon, and India is no exception.

This erosion of public trust of the regime and consequent public pressure is driving the polity world over to have a relook at their regulatory regimes, including competition enforcement, with respect to digital economy. Many jurisdictions are also crafting their national digital economy strategies, resulting in an epoch of protectionism. In sum, things are yet to settle.

Few things, however, have become clearer. First, 'data' is one of the most important ingredients for competitiveness of firms in the digital economy and hence assumes a central role in regulatory and competition parlance. The CLRC in its report rightly observes that "any discussion on the antitrust implications of the new age economy is incomplete without assessing the accumulation and use of data by data-rich incumbents in the digital market". The CLRC, therefore, recommends inclusion of 'control over data' and 'network effects' as factors for determining market power.

Secondly, enhanced access to data by market players can lead to better competition in digital economy. The draft Personal Data Protection Bill, 2019, therefore has provisions on data portability and interoperability. Third, in digital economy, big platforms are also *de facto* regulators and are in positions to influence market behaviours. Thus, there are talks of mandating greater responsibility upon them. To this effect, there are plans of introducing Platform-to-Business regulations in few jurisdictions.

Furthermore, it is becoming clearer that to ensure 'just transition' into digital economy, a coordinated whole-of-government approach is mooted, as against taking measures in silo. In this regard, adopting a National Competition Policy is being talked about as an essential ingredient of optimal solution. Adhering to competition principles in national and state policies –

such as Industrial Policy (including Intellectual Property Policy), Trade Policy, Digital Communication Policy etc. – would yield better solutions to the growing concentration and consequent widening of inequality. As far as competition enforcement is concerned, there are pressing expert views of returning to the original test of ‘maximizing welfare’ from the present focus on the sole maximisation of consumer surplus.

In light of the aforesaid, this seventh edition of the report ‘Competition and Regulation in India, 2019’ (ICRR 2019) presents some useful insights. In this volume, experts have contributed their views on various regulatory and competition issues of the emerging digital economy in India. We as editors of this volume owe credit to authors, namely A Didar Singh, Cihan Dogan, Ebru Ince, Garima Sodhi, Raju Parakkal, Rinki Singh, Sarang Moharir, Simi TB, Smriti Parsheera, Subhashish Gupta and V Sridhar.

We are also grateful to experts who reviewed many chapters that were received and hence helped us in a tough decision of selecting the present ones. Some of such reviewers included: Alice Pham, Amol Kulkarni, Arul Scaria, Cornelius Dube, Garima Sodhi, Julien Grollier, Mohini Ganguly, Nitya Nanda, Parveer Ghuman, Raju Parakkal, Siddharth Narayan and Vikas Kathuria.

Various process-related assistances were provided by Nimra Khan and Akshay Sharma. The editorial assistance was provided by Madhuri Vasnani and the layout was done by Mukesh Tyagi and Rajkumar Trivedi. We are grateful for their efforts.

Further, we are highly obliged by and grateful to Ashok Kumar Gupta and Nitin Desai for agreeing to write the Foreword and Preface, respectively.

Last but not the least we are grateful to Pradeep S Mehta, who has thus far been editing the ICRRs, for his overall guidance and for passing this editorial baton to us, the next generation in CUTS International. We are also grateful to Arvind Mayaram for his encouragement and guidance.

With this, we present to you the ICRR 2019, dedicated to the theme *Digital Economy: Hitting the reset button on competition and regulatory governance*. We hope you will find this volume as interesting as the earlier editions (available at: <https://cuts-ccier.org/icrr-2017/>).

We would appreciate receiving your comments at: ccier@cuts.org, usm@cuts.org, ujk@cuts.org.

Jaipur
January 2020

Udai S Mehta and Ujjwal Kumar
CUTS International

Abbreviations

2SM	:	Two-Sided Markets
AePS	:	Aadhaar-enabled Payment System
AI	:	Artificial Intelligence
ANDS	:	Australian National Data Service
B2B	:	Business to Business
B2C	:	Business to Consumer
BHIM-UPI	:	Bharat Interface for Money-Unified Payments Interface
CAIT	:	Confederation of All India Traders
CCI	:	Competition Commission of India
CDD	:	Competition Distortion Dossiers
CLA	:	Critical Loss Analysis
CLRC	:	Competition Law Review Committee
CMA	:	Competition & Markets Authority, UK
CSOs	:	Civil Society Organisations
DANS	:	Data Archiving and Network Services
DG	:	Director-General
DOI	:	Digital Object Identifier
DTH	:	Direct-to-Home
DWP	:	Downward Wage Pressure
EU	:	European Union
FDI	:	Foreign Direct Investment
FMCGs	:	Fast-Moving Consumer Goods
GST	:	Goods and Services Tax
GDP	:	Gross Domestic Product
GDPR	:	General Data Protection Regulation
GPRS	:	General Packet Radio Service
GPS	:	Global Position System

HHI	:	Herfindahl-Hirschman Index
HIC	:	Human-In-Command
HITL	:	Human-In-The-Loop
HOTL	:	Human-On-The-Loop
IDF	:	International DOI Foundation
IEEE	:	The Institute of Electrical and Electronics Engineers
IMPS	:	Immediate Payment Service
IPRs	:	Intellectual Property Rights
MoU	:	Memorandum of Understanding
MSMEs	:	Micro, Small and Medium-sized Enterprises
MSMP	:	Multi-Sided Market Place
NAIM	:	National AI Marketplace
NASSCOM	:	National Association of Software and Services Companies
NCLAT	:	National Company Law Appellate Tribunal
NCP	:	National Competition Policy
NEP	:	National E-commerce Policy
NETC	:	National Electronic Toll Collection
NITI Aayog	:	The National Institution for Transforming India, Aayog
OECD	:	Organisation for Economic Cooperation and Development
P2B	:	Platform-To-Business
P2M	:	Person to Merchant
P2P	:	Peer-to-Peer
PDP	:	Personal Data Protection (Bill)
PII	:	Personally Identifiable Information
PPI	:	Pre Paid Instruments
PSUs	:	Public Sector Undertakings
RBI	:	Reserve Bank of India
RIA	:	Regulatory Impact Assessment
SSDDW	:	Small but Significant and Non-Transitory Decrease in Wages
SSNIP	:	Small but Significant Non-Transitory Increase in Price

CHAPTER 1

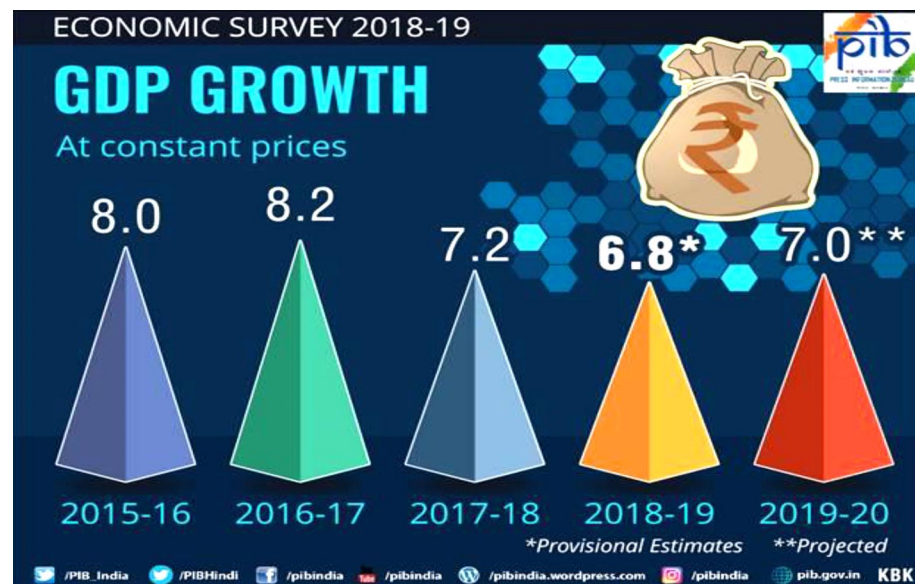
An Overview

India's Present Macroeconomic Status

Though India aspires to become a US\$5tn economy by 2024-25, the present macroeconomic indicators are not encouraging as far as achieving the target is concerned. In 2018-19, the size of the Indian economy (at current prices) was US\$2.75tn. In 2019-20, it is expected to become US\$3.03tn, with a 5.5 percent real growth rate and 4.5 percent inflation. Taking the 2019-20 figure as a base, India needs to grow 11 percent annually for the next five years to reach its target of becoming a US\$5tn economy by 2024-25. If average inflation is 5 percent, the economy's real annual growth rate would need to be 6 percent.¹

The Economic Survey of India 2018-19 had estimated Gross Domestic Product (GDP) growth for FY20 at 7 percent (see Figure 1.1). However, viewing the

Figure 1.1: GDP Growth in the Last Five Years



Source: Economic Survey of India, 2018-19

quarterly growth rates so far in FY20, reaching this figure seems very unlikely. The Indian economy has grown by 5 and 4.5 percent in the first and second quarters of FY20 respectively, and the third quarter is not likely to see any improvement. The growth rate of 4.5 percent is the lowest in the last six years.

Therefore, with 5 percent annual real growth as a ‘new normal’ for India (as argued by many economists), and 5 percent annual inflation (as indicated by the Reserve Bank of India’s Monetary Policy Committee), we will have 10 percent nominal growth. Even if we can maintain this rate over the next five years, in 2024-25, the size of India’s economy will still be US\$4,872bn, falling just short of the US\$5tn target.²

Though some say that this slowdown is merely cyclical, most experts are calling for structural reforms to address the economy’s challenges. The only major response from the government has been to reduce the corporate tax rate from 30 to 22 percent. The demand is for some deeper reforms, which could *inter alia* enhance competitiveness in the economy by eliminating market distortionary measures. In this scenario, National Competition Policy (NCP) can be one of the key ingredients of the structural reform to boost economic growth.

Need for National Competition Policy

An effective competition policy can bring in that extra boost to the economy. A review conducted by the National Productivity Commission in Australia in 2005 found that productivity and price changes in infrastructure sectors where competition reforms were implemented boosted Australia’s GDP by 2.5 percent. Similarly, South Africa saw positive effects on total factor productivity growth because of competition policy.

From a report³ of the Organisation for Economic Cooperation and Development (OECD), there appears to be a consensus that effective competition policy can result in an extra two-three percent growth. Competition policy also has a significant positive impact on growth and jobs, and important redistributive effects that benefit the poorest in society.

The absence of effective competition has been identified as one of the causes of problems in economies. For instance, Thomas Philippon, in his recent book, *The Great Reversal*, has argued that America is not facing socio-economic problems due to the flaws of capitalism or the inevitabilities of globalisation, but due to the high concentration of corporate power. Large firms, by lobbying against the competition, drive their profits higher while depressing wages and limiting opportunities for investment, innovation and growth. Similarly, Vijay Kelkar and Ajay Shah, in their seminal work, *In Service Of*

Figure 1.2: How Competition Policy Induce Economic Growth



Source: OECD

The Republic, argue that more freedom and competition can push firms to cut costs, innovate and deliver the best bargains for customers. They highlighted the need for public policy to address market failures, reduce entry barriers and increase competition.

Recently, The Philippines have adopted a NCP – a comprehensive framework that will steer regulations and administrative procedures to promote free and fair market competition. Apart from guiding effective enforcement of the competition law, the policy will help in the enactment of pro-competitive government regulations and internalisation of the principle of competitive neutrality. In India, however, a draft NCP is languishing on the website of the Ministry of Corporate Affairs since November 2011,⁴ despite the *Three-Year Action Agenda* by the NITI Aayog recommending comprehensive competition policy reforms.

The NCP of India should focus on promoting free and fair competition, ensuring a level-playing-field between the private and public sectors, enhancing consumer welfare and addressing policies and practices that distort competition.

Competition Distortions: Decadal Picture through CDD

Since 2009, CUTS has been producing the *Dossier on Competition Distortions in India*⁵ – a quarterly series of a short and precise publication tracing various issues and elements that can distort and/or promote competition in India. The dossiers mainly focus on policies and practices that have prevailed within the particular period under review that is likely to distort the process of competition.⁶

The main objective of the competition distortion dossiers (CDD) is to showcase instances where the government's well-meaning interventions in India could end up distorting the process of competition, and in the process compromise consumer welfare. The CDD also offers an alternative view and approach which, from CUTS' point of view, could have helped attain the anticipated benefits better. Furthermore, the CDD identifies and commends some pro-competition interventions which the government would have made through different policy pronouncements.

After analysing the focus areas of all the CDD editions, one can find a trend emerging based on the dominance of some types of distortions. The following paragraphs give an overview of the sources of distortions that have dominated in the last decade.

Competitive Neutrality

There are a number of firms in India owned by the government which is in competition with private sector establishments. The objective of competition policy and the law is generally to protect the process of competition rather than individual firms. In other words, stifling competition in the market generally tends to disadvantage consumers regardless of whether the key players in reducing competition are public sector units or not. As a result, governments should generally try not to introduce policies that put public sector units at an advantage compared to their private-sector competitors.

This situation of ensuring that government business activities in competition with the private sector do not have a competitive advantage due to government ownership is known as competitive neutrality. Governments that observe competitive neutrality tend to have more competitive outcomes in the market, especially in an environment where government ownership in business activities is high.

However, a number of cases have been reported where the principle of competitive neutrality was being violated, to the disadvantage of private sector enterprises. For example, there was a directive in 2009 by the Indian government for all government official travellers to use only Air India

rather than any other privately-owned airlines. The rationale was that Air India was making losses and there was a need to boost patronage so that the performance would improve, which would also go a long way in making the airline attractive to investors. However, given that there is a significant business that would be diverted from the private sector competitors, it would also affect their viability. The airline losses could be induced by other inefficiencies, diverting patronage to an inefficiently-run airline would also see the whole industry being affected with minimal impact on the performance of Air India.

Another example of competitive neutrality violations emanated from the purchase preferences in the procurement policies. The procurement policies were designed (in 2011) such that if a public sector unit is bidding in competition with the private sector and the price of the public sector unit falls above that of the lowest private-sector bidder but within the 10 percent margin, then the private sector unit should be considered. This was a potential competition distorting policy that required careful assessment to ascertain whether the anticipated benefits would not be outweighed by the losses associated with engaging a less efficient firm.

A competitive neutrality issue raised in 2011 also related to the government policy of requiring all public sector units to ensure that at least 80 percent of their resources are banked with banks that have public sector ownership. This also created an uneven playing field tilted in favour of public sector banks. In 2012, an issue of competitive neutrality absence cropped up again when the Delhi government barred private telecom providers from accessing a newly government accommodation complex. This stifled competition.

Arbitrarily using Trade Policy Measures

When the viability of domestic firms is threatened by imports, a government can impose anti-dumping measures, general import duties or apply safeguard measures to stop the imports. India has been using these measures quite frequently, often at the cost of competition and consumer welfare.

Antidumping Duty

Antidumping duties⁷ were in trend in this decade that ended up being competition distorting. There are numerous instances where businesses, through their associations, lobby government for the introduction of import duty as a way of preventing foreign products from entering the domestic market. In general, dumping takes place when an exporting company exports a product at a price that is lower than the price it normally charges in its own home market. This means that firms in the economy competing with a dumped product might face an uneven playing field, as it is likely that the dumped price is below their viable price threshold.

There are several reasons why a firm might want to dump its products in the export market. This might be intended to penetrate the market and ensure that the brand is known in the international market while driving out competition. However, once the product is known, the firm would increase its price as brand loyalty also drives sales. A firm can also dump its products as a way of generating revenue, especially if the product would have struggled in the domestic market due to defects or other attributes that were not known when the products were produced. Dumping, in this case, would be an opportunity to at least earn something rather than losing revenue entirely.

As a result, governments are allowed, even under the WTO rules, to impose an anti-dumping duty as a way of protecting the domestic industry from harm. However, situations also arise where firms are quick to allege dumping whenever they fail to compete with a foreign product due to their own inefficiencies. In most cases, therefore, due diligence to establish dumping would not be carried out and the request from the business would lack details to prove dumping. The request spanned across a number of products and included services as well. On services, an example is the request to protect the domestic shipping industry from foreign shipping firms based on low charges. Other products include polypropylene, telecommunication equipment, tyres, rubber, caustic soda, solar cells, steel products and chemicals used in the beverages and pharmaceutical industries.

The message from the CDDs in all these cases was mainly to showcase the possible competition harm that could result from the elimination of competition and the impact on consumer welfare, especially if the product was not being ‘dumped’ but was only cheaper due to efficient production methods compared to those employed in India. In addition, imposing anti-dumping duty for longer periods of time while there are no adequate competitive constraints in the domestic industry can artificially constrain fair competition and harm consumers as the domestic firms acquire market power, which they can use to increase the prices.

Safeguard Measures

In addition to anti-dumping, another type of trade policy measure which received a lot of coverage in the CDDs is ‘safeguard measures.’⁸ There is a risk that safeguard measures can be imposed when due diligence has not been adequately done, especially a deeper understanding of the domestic industry and the capacity of the firms.

A good example is the safeguard measures to facilitate the manufacture of solar-equipment. The government imposed a 25 percent tariff on solar cells and modules imported from China and Malaysia in 2018 for two years as a safeguard measure. The failure of the measures was showcased in one of

the CDDs, which generally pointed out that imposing a safeguard duty when the efficiency of the local industry is poor would not work. Following the imposition, solar power developers began to delay the commissioning of projects until the safeguard duty period elapses.

Similarly, government agencies cancelled auctions whenever the winning tariffs by the domestic firms were deemed too high. In addition, since the safeguard duty was targeted at imports mainly from China and Taiwan, there was a rise in imports from Southeast Asian countries, such as Thailand and Vietnam.

The CDD generally gave the following conclusions as critical in ensuring that safeguards achieve their intended objectives. First, prices offered by domestic producers were too high above imports such that solar power developers were prepared to wait until the safeguard duty expires. Thus, the capacity of the domestic firms was not taken into cognisance when the safeguard duty was introduced. Second, the safeguard was poorly designed. While China and Taiwan were identified, there were other alternative suppliers imposing the same competition traits that the safeguard was intended to protect. This shows that the solar equipment production market was not properly analysed before the introduction of the safeguard measure.

Duty and General Protection

A significant coverage of the CDDs was also on issues to do with duty imposition and protection in general. The main argument was the need for caution, given the absence of careful cost-benefit analysis⁹ from the measures. The analysis was generally similar to that offered on issues to do with safeguards and anti-dumping duties. A number of products where duty was requested by the firms include milk, coal, kraft paper, LED & LCD televisions, automobile components and pulses. The elimination of import competition through the import duty could give rise to high market concentration with possibilities of abuse. Thus, protection should only be given in deserving cases where domestic firms have the opportunity to recover in the temporary period to adequately compete with the restricted foreign firms when the duty period elapses.

Other Policy Distortions on Competition

The CDDs also covered various other policy-induced distortions on competition as a way of giving insights on how government policy could go against the spirit of competition. For example, in 2009 the Reserve Bank of India (RBI) sought to have banks exempted from complying with the merger and acquisition (M&A) provisions of the Competition Act, 2002 as the central bank felt they can adequately deal with the issue under its own laws. The CDD cautioned against the move, given that there are so many regulated

sectors that can all be argued to be special such that exempting all of them based on this precedent would virtually defeat the whole purpose of regulating mergers and acquisitions.

Another example is the decision by the National Highways Authority of India (NHAI) in 2011 to restrict the number of bidders for engineering procurement contracts projects in Uttar Pradesh to seven bidders. This was a direct policy restricting competition and hence also facilitated collusion by the bidders as they were few and could easily communicate among themselves. In 2017, the decision to merge about 13 public sector units in the oil business into one entity was also identified as an example of a policy that directly reduced the number of players and hence was competition distorting. In the same year, the Delhi government also announced an intention to ban the app-based cab services, which would have reduced competition and stifled innovation.

The CDDs also covered state aid and subsidies which tend to distort competition. In 2012, caution was given on the impact that state aid would have on competition, especially constant bailouts for Air India. When the government asked four state-owned general insurance companies to desist from competition against each other as well as share information in 2012, it was flagged that how such a measure could turn out to be counterproductive as the reduction in competition could have adverse effects on consumers as this amounted to cartelisation.

Policies that affected investment in general and hence competition were also covered by the CDDs. In 2014, the 5/20 policy specified that only those airlines that have been in operation for at least five years with a fleet size of at least 20 would get a permit to serve international routes. The policy restricted investment which would have enabled those recent entrants to also participate in the markets, which also affected competition. The decision in 2014 to have restrictions on foreign direct investment (FDI) in the retail sector without a cost-benefit analysis was also flagged.

Commending Pro-competition Policy Stances

In addition to identifying distortions, the CDDs also hailed the government for undertaking some pro-competition measures whenever these were identified. A number of pro-competition decisions were thus commended by the CDDs. Examples include the decision to relax the reservation policy for micro, small and medium-sized enterprises (MSMEs) in 2015 which was stifling competition and restricting innovation for products and services which could be offered by the MSMEs. In 2011, some state governments were commended for reforming the Agriculture Produce Market Committees (APMC) Act to encourage investment and remove entry barriers. In addition,

the de-controlling of the sugar market was hailed in 2012 as this would allow more investment and competition forces to prevail.

Advisory

In addition to commending and cautioning on the different policy announcements, the CDDs also focused on providing advisory opinions. This is a common issue across many CDDs where some alternative suggestions are given on how the policy could be made to work better. For example, in 2019 it was suggested that there is a need to take a wholesome approach in promoting solar panel manufacturing. There is a need to look at alternative ways of promoting the whole value and supply chain rather than simply revising tender specifications, given that the local industry is incapacitated to efficiently participate.

In addition, it was also cautioned that while some attempts could be made to revive Air India, the challenges were not unique to the airline but all of them. As a result, a look at the cost drivers would go a long way in identifying a lasting solution to the challenges. For example, one of the cost drivers for the industry was high taxation of aviation fuel levied by states, some of them were actually the highest in the world. Reducing the tax could be a better option in bailing out the airline compared to giving unsustainable aids.

Concluding Observations on the CDD

The CDDs are widely disseminated and commented upon by practitioners from the government, private sector and civil society. The CDDs have contributed positively to CUTS' advocacy agenda on competition policy. In all the policies that the government has introduced that end up having some distortion elements, the intention of government would be well-meaning, with the expectation being that the measures would improve either producer or consumer welfare.

For this purpose, CUTS has developed “Competition Impact Assessment Toolkit – A Framework to Assess Competition Distortions Induced by Government Policies in the Developing World”¹⁰ and “Framework for Competition Reforms – A Practitioners' Guidebook”¹¹, which could be used to make government policies, laws and regulations more pro-competition.

Digitalisation of Economy – An Opportunity

Even though the present economic indicators are dismal, posing pessimism towards India's aspiration of attaining the US\$5tn economy by FY25, the fast digitalisation of the economy provides a huge opportunity and hence some optimism.¹² However, to reap optimum advantage from the digital

economy, it needs to be carefully regulated, particularly by inducing ‘inclusiveness’ and avoiding the further concentration of the economy in order to make it sustainable.

This ICRR 2019 Report¹³ is, therefore, very timely because the theme is *‘Digital Economy – Hitting the reset button on competition and regulatory governance’*. The Report throws light on some very important facets of regulation and competition that are still not settled in the emerging digital economy. The insights from this report can be helpful in optimising gains from the economy.

While the chapter following this chapter (i.e. Chapter 2) is a regular feature depicting survey-based perception and awareness about competition and regulation among general masses, the other chapters (i.e. Chapters 3 to 9) are contributions from domain experts on various India-centric regulatory and competition issues in the digital economy. The last chapter (i.e. Chapter 10) is Epilogue presenting a way forward. The following paragraphs illustrate the core chapters (i.e. Chapters 3-9).

Chapter 3 on Antitrust in the Digital Era: Rethinking Dominance and its Abuse

This Chapter examines the growth of the digital economy and its corporate titans—globally and in India—and evaluates the implications of that growth and dominance for antitrust analysis. It flags the challenges to the consumer welfare standard in the antitrust analysis and the importance of data availability across the economic sphere. It argues that antitrust should no longer be only about consumers in the relevant market because the impact of its decisions extends beyond consumers to the larger society.

Chapter 4 on Buyer Power, Competition Law and Platforms

This Chapter deals with competition concerns in monopsony markets that may tend to reduce the price paid to suppliers and to restrict the amount that is bought. It highlights the lack of sufficient jurisprudence in dealing with abuse of dominance in monopsony markets (buyers’ power), which includes modern-day big digital platforms. The Chapter analyses buyer power and its effect on consumer welfare, as well as the interface between competition law and buyer power.

Chapter 5 on Personal Data and Consumer Welfare in the Digital Economy

This Chapter discusses the importance of consumer welfare in the digital economy, spanning across the fields of competition, consumer protection and data protection laws. It also discusses the interactions between these fields as well as the complementarity and differences in their approaches. The Chapter highlights differences in the design and scope of the interventions under each framework. It argues that continuing with a silo-

based approach is not going to ensure the overall welfare of consumers in the digital economy and that an appropriate legal and institutional mechanism to facilitate interactions across these fields is the need of the hour.

Chapter 6 on Contemporary Regulatory and Competition Concerns for E-commerce in India

This Chapter, recognising the potential of e-commerce for generating new opportunities for micro, small and medium enterprises (MSMEs) and farmers, analyses various contemporary regulatory and competition concerns that the sector is facing in India. Most of such concerns are interlinked. It advocates both *ex-ante* regulation and *ex-post* case-by-case competition enforcement in dealing with such concerns. It also advocates the adoption of NCP.

Chapter 7 on Challenges Associated with the Market Definition Process on E-commerce Platforms: Why Bother with a Market Definition?

This Chapter analyses the challenges of adopting traditional tools to define the market and assess market power in multisided markets, and the adverse effects of erroneous market definition on the competition. It argues that due to inherent problems associated with the market shares calculation of the multi-sided markets, consideration of other factors as a proxy for the purpose of market power assessment may be adopted. In this regard, the economic factors such as network effects, feedback effects and multi-homing could play more significant roles for multi-sided markets. Since these factors do not require a precise market definition, the necessity of defining a relevant product market in the case of multi-sided markets can be questioned.

Chapter 8 on Regulatory Framework for the National AI Marketplace

After deliberating upon the architecture of National Artificial Intelligence Marketplace (NAIM), this Chapter provides contours of possible guidelines for the platform to be sustainable, trustworthy, scalable, immutable, secure and accurate; and indicative policy and regulatory framework for addressing privacy, security, ethics and quality of data in the platform.

Chapter 9 on Relevant Market and Market Power in Ride Sharing Industry

This Chapter describes the ride-sharing industry ecosystem and suggests a new approach for defining the relevant market and assessing the market power using the traditional tools adapted to new markets until new tools are developed for such markets. It concludes that the tools applied to define relevant market in traditional markets like SSNIP (Small but Significant Non-Transitory Increase in Prices) test, critical loss analysis (CLA), diversion ratios, conditional logit demand analyses etc. might not be effective in

multi-sided markets, and thus, require modifications for their application to such markets. It concludes that in the assessment of market power in multi-sided markets, market share may not be a suitable parameter.

Conclusion

As the ongoing digitalisation of economy presents an opportunity for course correction in order to uplift the sliding Indian economy, this Report provides the following insights to policymakers and regulators:

- Market distortionary measures, including those induced by public policies, need to be significantly reduced
- In order to enhance inclusiveness in digital economy right regulatory approach is mooted, which includes but not limited to:
 - optimal regulation of personal data and its enhanced sharing among market players;
 - revisiting consumer welfare standards, taking into account macroeconomic concerns; and
 - remodeling competition assessment processes to deal with new-age concerns
- Sectoral and competition regulation need to be in sync to achieve broader economic development. The role of upcoming data protection authority will be very important *vis-à-vis* competition in the digital economy.
- Adoption of a NCP can aid in all the above. It also has the potential to enhance national GDP as well as enhance inclusiveness in the economy.

Endnotes

- 1 <https://www.livemint.com/opinion/columns/opinion-the-relevance-of-a-good-competition-policy-to-our-aims-11577377302114.html>
- 2 *Ibid*
- 3 Factsheet on how competition policy affects macro-economic outcomes, 2014 (OECD); (bit.ly/2PPGAhd)
- 4 https://www.mca.gov.in/Ministry/pdf/Revised_Draft_National_Competition_Policy_2011_17nov2011.pdf
- 5 <https://cuts-ccier.org/dossier-competition-distortions-in-india/>
- 6 Competition distortion in this context refers to a situation where firms are not competing under equal conditions. This could be a result of several factors, including anti-competitive practices of firms as well as government policies, regulations and praxis.
- 7 An anti-dumping duty is imposed by government on foreign imports that are believed to be ‘dumped’ into the local market. The most critical issue is to undertake a detailed analysis to prove that indeed there is dumping that is taking place.
- 8 Safeguards are generally regarded as an emergency measure. Under the WTO rules, a member may restrict imports of a product temporarily to protect a domestic industry from harm that is associated with an increase in the imports. Safeguard measures include a restriction on the imports for a specified period of time to enable the domestic market to recover, mainly through an imposition of a prohibitive duty.
- 9 <https://cuts-ccier.org/ria-advocacy/>
- 10 https://cuts-ccier.org/pdf/CUTS_Competition_Impact_Assessment_Toolkit-A_Framework_to_Assess_Competition_Distortions_Induced_by_Government_Policies_in_the_Developing_World.pdf
- 11 https://cuts-ccier.org/pdf/FCR_Practitioners_Guidebook.pdf
- 12 <https://www.financialexpress.com/industry/digitalisation-is-driving-india-to-a-5-trillion-economy/1806989/>
- 13 The earlier editions of this flagship biennial publication jointly by CUTS and CIRC since 2007 can be found at: <https://cuts-ccier.org/icrr-2017/>

CHAPTER 2

Perception and Awareness Reporting

Introduction

Since 2007, CUTS has been conducting biennial surveys to gauge perception and awareness levels (changes therein) of select stakeholder group surveys on competition and regulatory scenario in India. In line with this tradition, in 2019, select members of civil society, academia and industry professionals were interviewed about their perception and awareness levels regarding competition and regulatory scenarios across different sectors, traditional as well as emerging, in India. The survey also assessed the nature and impact of government policies and efficacy of regulatory practices in the country.

This chapter sets out some of the main findings from the survey, and changes in perception and awareness levels in the last two years. The survey was conducted in the following sections: perception about 'level of competition' and 'nature of market practices'; awareness about 'regulation and regulatory agencies'; and perceived impact of 'government policies.'

Data and Survey Design

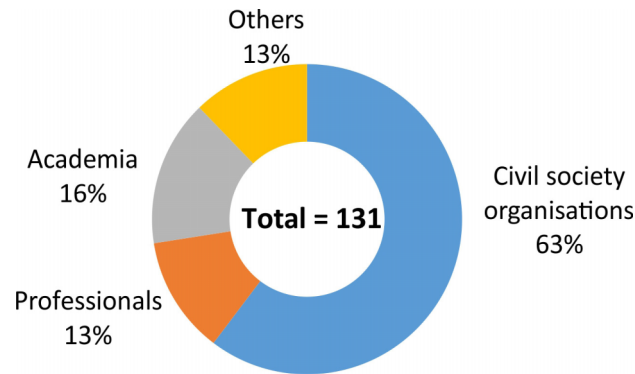
The survey had 131 respondents, across 17 states. The regions are represented by Rajasthan and Maharashtra in the west; New Delhi, Himachal Pradesh, Chandigarh, Uttar Pradesh, Uttarakhand and Haryana in the north; Madhya Pradesh at the centre; West Bengal in the east; Tripura, Assam, Manipur and Meghalaya the northeast region, and Tamil Nadu, Andhra Pradesh and Karnataka in the south.

The survey has been slimmed down in the current year to focus on questions, which are becoming more relevant to modern markets.

Composition of Stakeholders

In the current year, the composition of stakeholders leaned heavily towards civil society (CSO) representatives with over half of participants identifying themselves as CSO representatives, and 16 percent identifying themselves as academia representatives. Professionals and stakeholders who identified themselves as 'others' each consisted of 13 percent of respondents.

Figure 2.1: Composition of Stakeholders



Analysis of Survey Findings/Results

Level of Competition

Stakeholders were asked about their perception of the level of competition in the Indian market, as seen by the number of choices consumers have amongst products or services, ease of access to services, and the quality of services available. An effective market is characterised as providing a range of options from multiple suppliers to consumers and allowing free entry and exit for firms. An ineffective market, on the other hand, is a place, in which barriers to entry for new firms exist and are consequently of limited competitiveness, firms have no incentives to offer high-quality goods and services or reduce prices.

Respondents indicated that sufficient choices are available across the board, in fast-moving consumer goods (FMCGs); technological products, such as mobiles, laptops, tablets and utilities like the fridge and air coolers. About 80 percent or more of respondents indicated that there was enough choice in these sectors. In products related to automobiles and transportation, such as a small car, bicycle and scooters, 68 percent, a smaller but still significant section of respondents indicated that there was enough choice amongst products.

When the responses relating to choices available in the FMCG sector were compared with responses in 2017, a modest upward swing in respondents who indicated that there was enough choice was noticed. Consequently, there was a downward swing in respondents who indicated that there was no choice visible. This indicates an overall increase in choices and competition in the FMCG sector in India.

Figure 2.2: Availability of Choices in Various Products

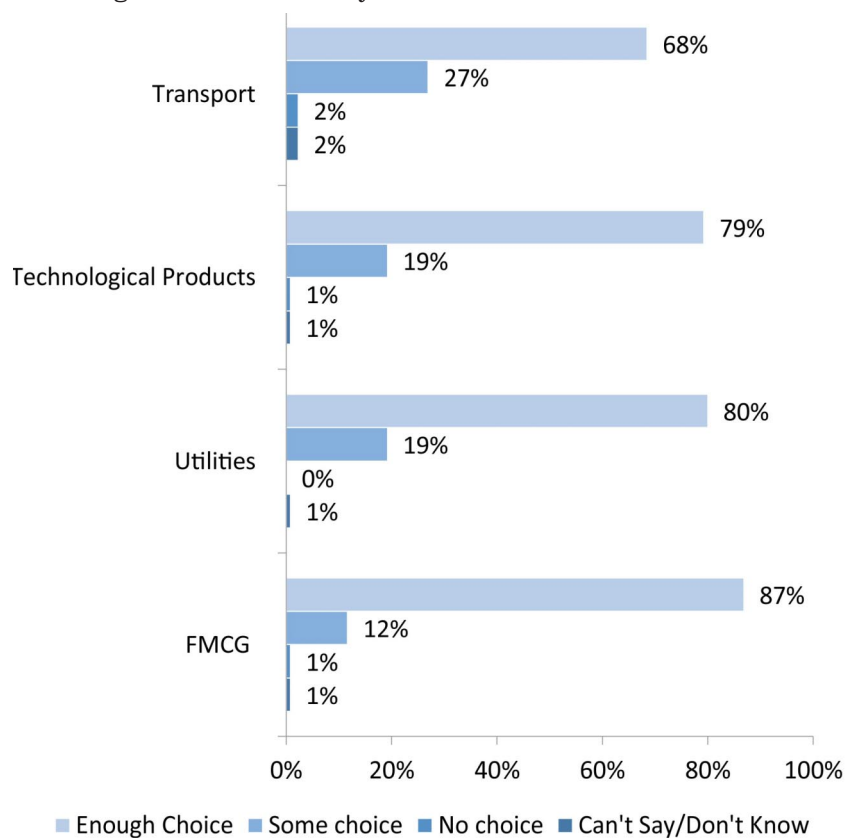


Figure 2.3: Comparison of Perception in Choices in FMCGs 2017-2019

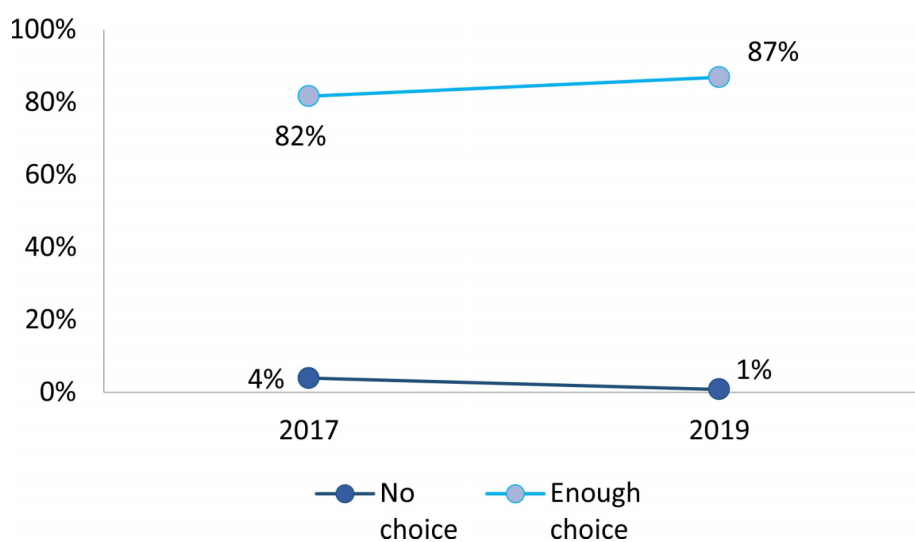
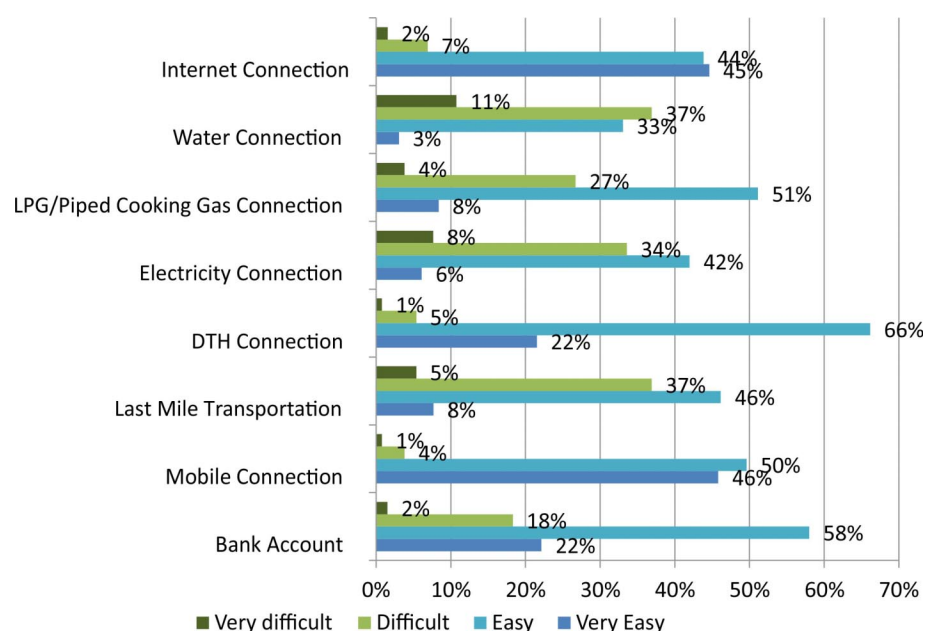


Figure 2.4: Ease of Getting Essential Services/Utilities

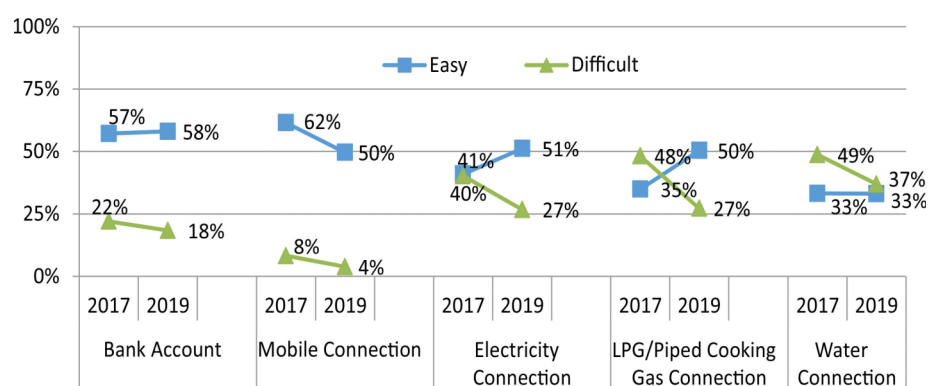


The survey also investigated the ease of getting a connection for several essential services, such as water, electricity and cooking gas; necessary services like a bank account, mobile account, internet, DTH (Direct to Home) services; and, other services like last-mile transportation.

In most cases, the percentage of respondents who found it 'easy' to access essential services is around half (Figure 2.4), indicating about half to 40 percent of respondents found it difficult to gain access to utilities. Receiving an internet (89 percent finding it easy or very easy) or DTH connection (88 percent finding it easy or very easy) is the easiest. Receiving a water connection appears to be most difficult, only a third of respondents found it 'easy' and only 3 percent found it 'very easy' to get a connection, and 37 percent found it 'difficult'. Securing an electricity connection also seems to be somewhat difficult, with only 48 percent finding it easy or very easy. Both are typically dominated by the public sector, with complex and inflexible government procedures. DTH and the internet are, in opposition, typically dominated by the private sector.

In comparison with 2017's survey responses (Figure 2.5), it can be seen that in all sectors, the percentage of consumers who found getting access to services 'difficult' have decreased. Only in the case of getting a water

Figure 2.5: Ease in Getting Services in 2019 with Respect to 2017



connection has this corresponded to an increase in the ‘very difficult’ to access sub-category, in all other cases this corresponds to an increase in the ‘easy’ or ‘very easy’ sub-categories. It may be concluded that as a whole, securing access to services is becoming easier.

Quality of Service

Along with ease of securing services, 60 percent or more of respondents agreed that quality of service was ‘good’ (Figure 2.6). Respondents were also asked about the perceived quality of these services. In all the cases, however, only electricity received a ‘very good’ response from 17 percent of respondents, with all other services receiving low responses in this sub-category. Around 35 percent of respondents (over one-third) noted that the quality of service in water was ‘bad.’ More than 30 percent of respondents perceived the quality of insurance services to be bad. It may be noted that government or public sector entities are the principal suppliers of water and insurance services in the country. This is also the case with Liquefied Petroleum Gas (LPG) services, wherein 68 percent of respondents found the quality of services ‘good’, indicating that government/government entities have the potential to provide a decent quality of services, with appropriate planning, enforcement and monitoring.

In comparison to 2017, it can be seen that the perception of quality in water service and mobile has become worse, but the trend in perception of the quality of other services is more positive. It may be recalled that in last year or so, the cases of call drops have increased substantially.

Figure 2.6: Assessment of Quality of Services

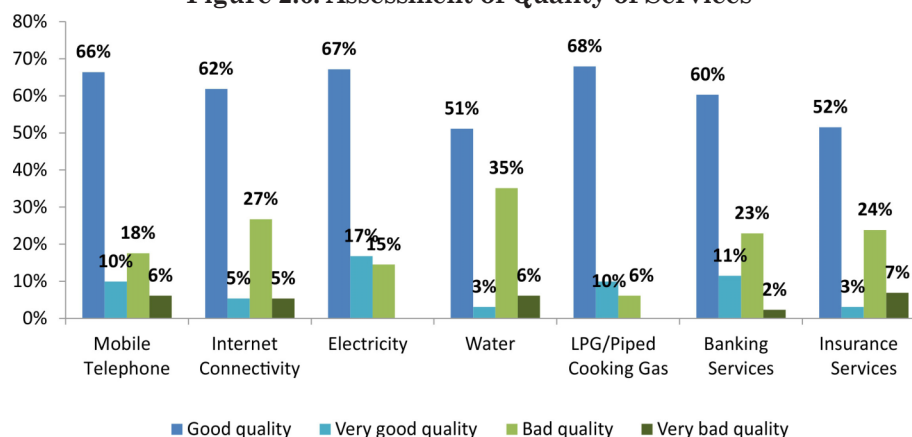
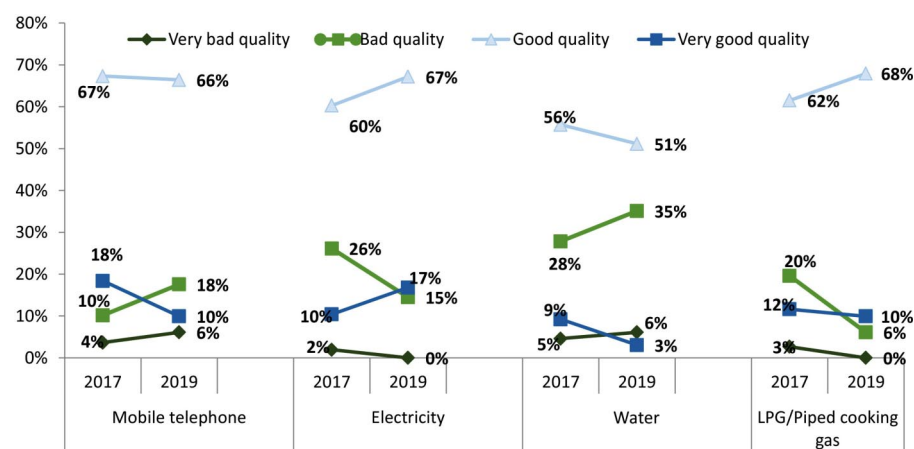


Figure 2.7: Comparison in Perception of Quality of Services 2017-2019

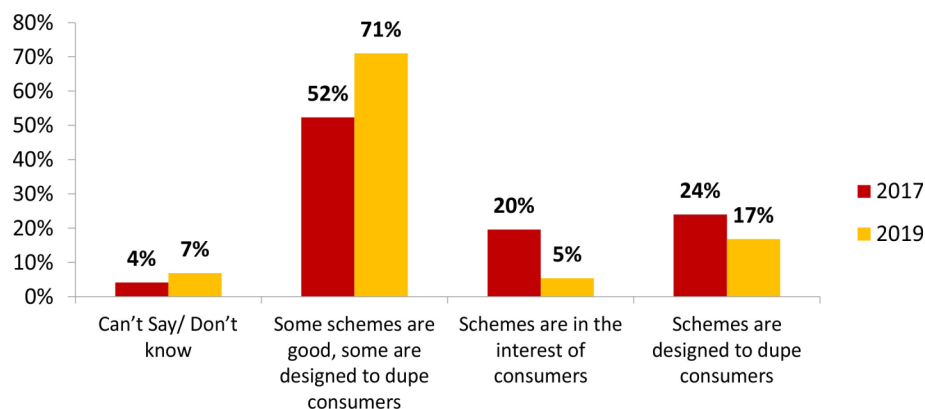


Nature of Practices

Stakeholders were also asked about their perception on several prevalent practices in the market. Their views are illustrated here.

The respondents were asked about their perception of promotional schemes designed to attract consumers (Figure 2.8). About 71 percent, a significant majority of respondents believe that promotional schemes are ambiguous, which is an increase from 2017. There is also a significant drop of respondents who believe that schemes are in the interest of consumers from 20 percent to 5 percent. This appears to be on account of increased awareness or unfavourable experiences among consumers with promotional schemes.

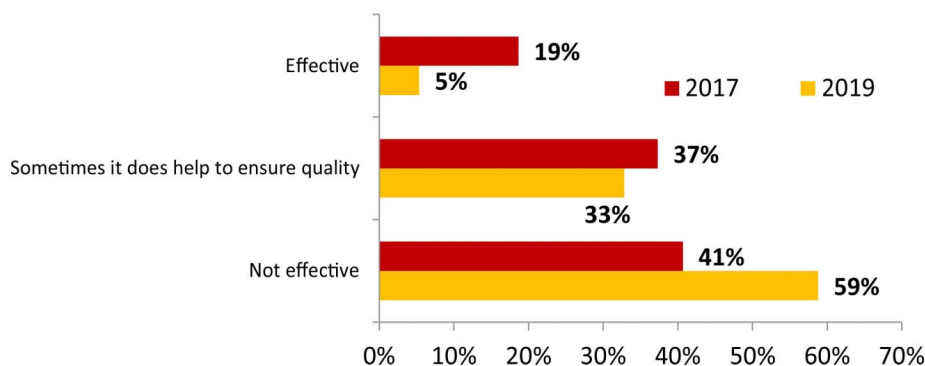
Figure 2.8: Promotional Schemes for Various Consumer Products



The inability of regulatory agencies to contain suspicious promotional schemes may also have resulted in the prevailing scenario.

A further question was asked to gauge the perception of 'tied selling' practices amongst stakeholders (Figure 2.9). Tied selling is the practice of requiring a consumer to buy a related product or service in addition to one's own: for example, a doctor may assign diagnostic tests to be conducted at a particular test centre. There is a clear increase in the perception that it is not an effective way to ensure quality. Around 18 percent increase in percentage (from 41 percent to 59 percent) of respondents subscribing to this view was observed. A similar drop in the percentage (from 19 percent to 5 percent) of those respondents who believe it is effective.

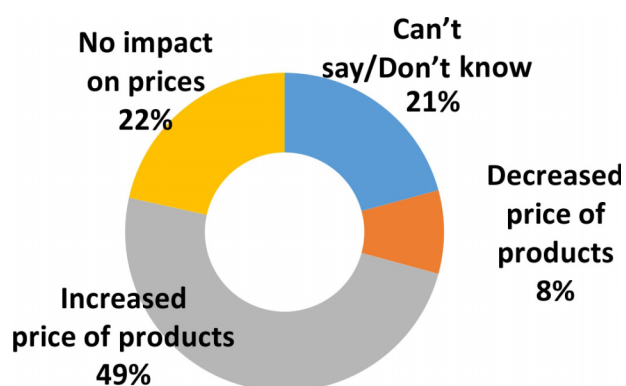
**Figure 2.9: Perceptions on Prevalent Tied Selling Practices:
Effective Way to Ensure Quality**



Stakeholders were also requested to provide their perception of other practices that are deeply relevant in the market currently. Some important questions to stakeholders include the impact of the Goods and Services Tax (GST) on prices (and thus consumer welfare), their perception on sectors that are currently or increasingly being dominated by one or few firms, and the current status of grievance redressal mechanism structures in relation to what existed previously.

Nearly half of respondents felt that GST had led to an increase in the price of products, but 22 percent felt that there had been no impact. Only 8 percent perceived a decrease in the price of products due to GST. This may indicate that GST has led to somewhat lessening of competition in the market, or that its imposition has resulted in an artificial increase in prices (Figure 2.10).

Figure 2.10: Impact of GST on Prices



In respect to the market dominance of a few firms in some sectors, 57 percent of respondents felt that market dominance was cause for concern and only 18 percent of respondents indicated that market forces would lead to a sufficiently competitive market. This should ideally alert the competition regulator, which should review growing consolidation in markets stringently.

In relation to grievance redress mechanisms, 42 percent of stakeholders perceived an improvement but 31 percent of respondents perceived no difference, with a small 6 percent respondents indicating that current grievance redressal mechanism structures were worse than in the past. There were some responses in the 'can't say/don't know' category as well, probably indicated lack of awareness. A substantial proportion of respondents not perceiving any improvement in grievance redress mechanisms should be a matter of grave concern for regulatory and consumer protection agencies.

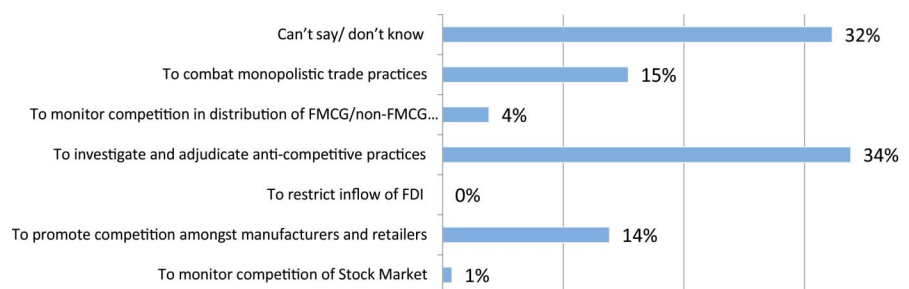
Awareness of Competition and Regulatory Issues

Competition is central to the operation of markets, fosters innovation, productivity and growth, all of which create wealth and reduce poverty.¹ An effective competition regime creates an environment, which maximises the welfare of consumers as well as a producer by bringing in allocated, static and dynamic efficiencies. Competitive markets bring greater choices and affordability to consumers, however, anti-competitive practices in the marketplace might affect the benefits.

Civil society organisations have a critical role in creating a sustainable competition regime, continuously participating in the decision-making process, acting as a pressure group, providing feedback from the ground. Awareness about competition and regulatory framework is necessary for any such participation to happen. The following sections capture the level of awareness of such competition and regulatory issues in India, particularly among representatives of non-government agencies and CSOs, based on some specific questions asked to survey participants.

The survey finding suggests that on being asked whether they are aware of the Competition Commission of India (CCI) or not, an overwhelming 71 percent of respondents stated that they are aware of the same while stating different reasons for the existence of competition commission in the country: such as promoting competition amongst manufacturers and retailers (14 percent), to combat monopolistic trade practices (15 percent). Though a healthy 34 percent suggested that its role is to investigate and adjudicate anti-competitive practices, a similar share (32 percent) of respondents also did not have any awareness of its role.

Figure 2.11: Purpose of Competition Commission of India



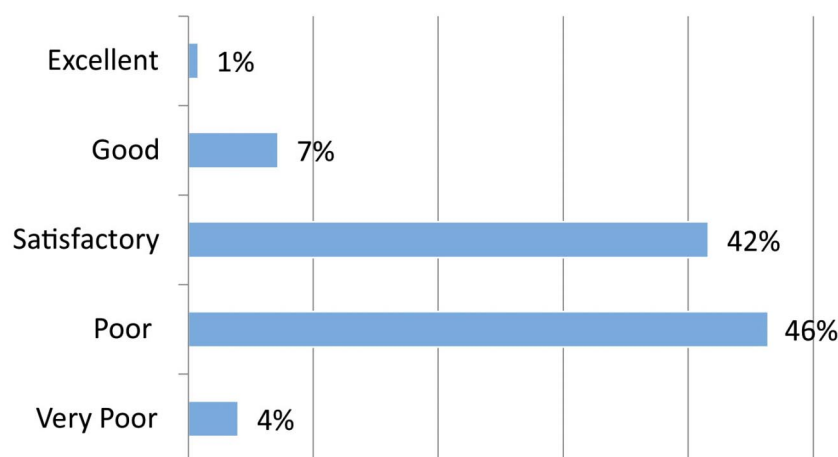
Comparing the finding with the previous version of the survey in 2017, it can be summarised that there is higher awareness about CCI in 2019. The findings suggest that the visibility of CCI has certainly increased over the years since it has been able to make several constructive interventions in purporting the economic growth. CCI, being a cross-sector regulator in India has been tasked with ensuring competition in the market. Though awareness about the institution has increased, far more people (around a third of respondents) do not know the function and mandate of CCI, which is worrying.

The establishment of regional/state-level benches of commission might be an effective way to further increase awareness and get access to the consumers. The use of technology and CSOs may also aid the commission in generating awareness about its role. The stakeholders were asked about the effectiveness of the existing regulatory institutions, such as CCI and consumer forums, in addressing anti-competitive and other unfair practices. Approximately 78 percent perceive such institutions as effective, however only 12 percent perceived them to be always effective. On the other hand, approximately 6 percent cited that such institutions have not been able to properly enforce their mandate.

A healthy 80 percent of respondents were aware of regulators in the telecom and electricity sector, but when inquired about the role of regulators, different understanding emerged. Around 72 percent mentioned that a regulator's role is to develop and implement rules that create a competitive environment in the market while 11 percent felt that the regulator's role is to facilitate business. Around 8 percent of participants said that the role of the regulator is to implement the competition law.

Increasingly, policies and regulations are being embedded with provisions that ensure decision making becomes more inclusive by mandating regulators to organise public consultation on various pertinent issues. Citizen participation in governance is supposed to provide comprehensive information for regulators to take wise and equitable decisions. An assessment of respondents suggests that only 40 percent of total respondents have participated in a stakeholder meeting organised by regulators. When requested to provide feedback on the nature of the meeting, respondents suggest that these meetings have been fully or partially participatory in some manner. Subsequently, respondents were asked about their perception of the quality of regulations in India. Only 8 percent of the total respondents said that it was in either excellent or good condition (Figure 2.12).

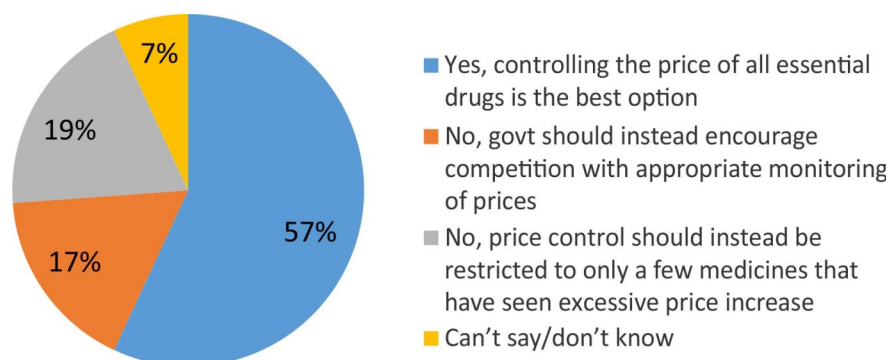
Figure 2.12: Quality of Regulation² in India



Nature and Impact of Government Policies/Measures

A range of questions was asked to stakeholders regarding the nature and impact of government policies on existing regulatory mechanisms. For example, India has experimented with price control of select patented products. The stakeholders were asked about their views on such price-fixing. An overwhelming 57 percent of the total respondents said that such price-fixing mechanism of essential medicines was indeed reasonable to protect the interest of consumers from high prices (Figure 2.13). However, the remaining 43 percent were either not in favour of complete price control or not sure about the impact of government policies like price control.

Figure 2.13: View on Government Controlling the Price of all Essential Drugs to Ensure Affordability and Access



Subsequently, the respondents were asked about perceptions, such as price control and alternative approaches that could be adopted. About 41 percent (down from 56 percent in 2017) said that the government should control the prices. However, 22 percent said that such mechanisms should not be implemented by a government but a specialised patents authority. Around 21 percent of respondents said that the approach should rather take a route where competition is promoted. View of respondents on this issue has not changed much, as the finding of the 2019 survey corroborates with findings of the 2017 survey (Figure 2.14).

In addition, the survey finding suggests that approximately 34 percent respondents believed that the government's policy of giving preference to public sector undertakings (PSUs) over the private sector is essential to meet their social objectives. Consequently, more than 60 percent respondents were either not in favour of unbridled preferential treatment to PSUs or did not have a firm opinion on the issue. Around 26 percent of the respondents disagreed with such policies, as they create an uneven playing field for other competitors and distorts the market. Further, approximately 22 percent (an increase of 5 percent from 2017) of respondents revealed that the government should provide PSUs autonomy and allow them to operate independently.

There has also been an ongoing debate on preserving the autonomy of independent institutions by appointing subject experts as heads without any previous experience of working in the government. Several retired senior bureaucrats have come under scrutiny for accepting key positions in

Figure 2.14: Should Government Fix Prices for Essential Commodities to Protect Consumers?

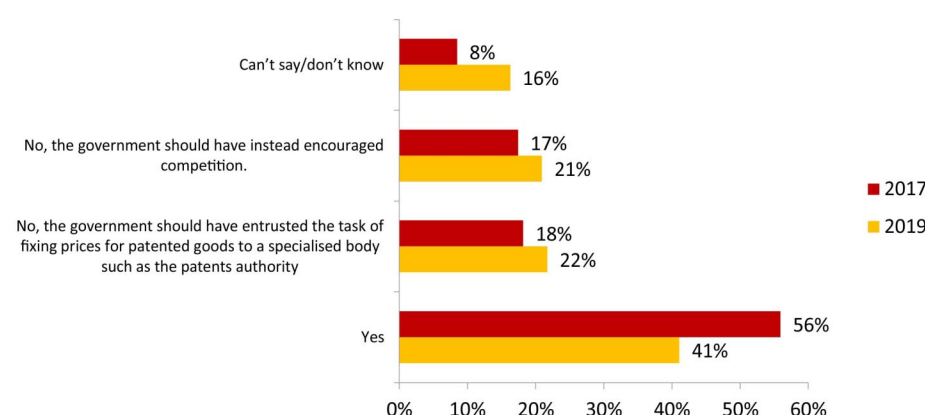
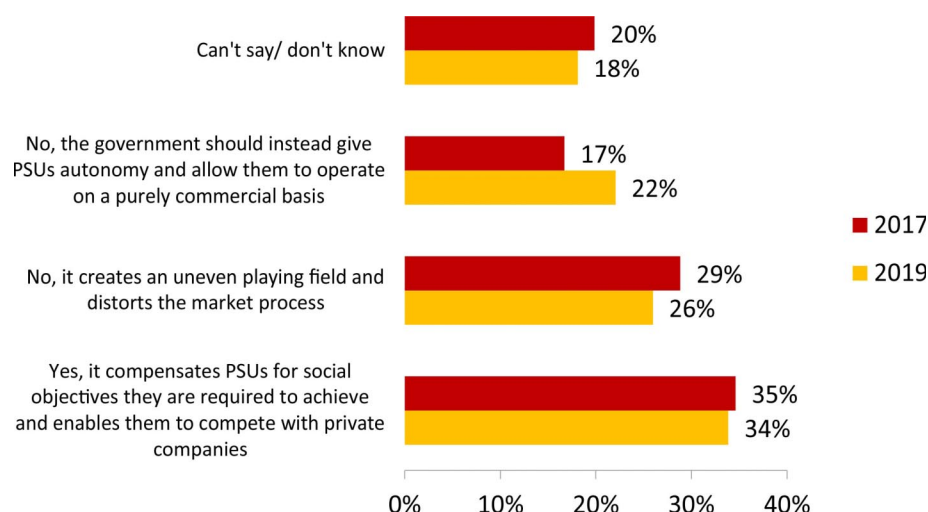


Figure 2.15: View on Government giving Purchase Preference to Public Sector Units in Government Procurement (to ensure PSUs viability in the long run)



government bodies after their retirement, but the trend is not limited to the bureaucracy alone. Over the past few decades, retired judges of the Supreme Court and high courts have gone on to head or serve as members of commissions, tribunals or quasi-judicial bodies.

The respondents were also asked about their views on the provision of appointing retired bureaucrats and judges as regulators. Around 52 percent of the respondents indicated that such appointments were inappropriate as it prevents the appointments of more deserving professionals and reduces regulatory effectiveness. However, 31 percent of respondents posited that such practice will allow regulators to maintain congenial relationship with the government and enhance regulatory effectiveness in the country.

Finally, the respondents were asked whether fees and charges announced by a Ministry/Department related to a sector affected the functioning and autonomy of the relevant regulator. Around 39 percent of the respondents said that these actions interfered in the functioning of the regulator and reduced their independence and autonomy. About 30 percent felt that these actions sometimes amounted to interference but other times helped in the development of the sector. Only 9 percent believed that these gave policy directions and enhanced the effectiveness of regulations. The rest of the respondents fell into 'can't say or don't know' category.

Conclusion

In conclusion, the 2019 edition of the "Perception and awareness survey on competition and regulatory scenario in India" has provided us enough food for thought.

- In relation to the section assessing perception of essential services, modest gains can be seen in both ease of securing and quality of services in most cases, apart from the significant case of water services where a greater depth of study is required to assess why perceptions of quality and ease of access has been reduced.
- In the section on prevalent market practices such as tied selling and promotional schemes, somewhat greater dissatisfaction about the same is reported as compared to the 2017 survey responses.
- Finally, as previous editions of the survey have noted, even the relatively well informed respondents appear to have a limited idea about the role of regulators and competition policy in the country; greater awareness amongst all relevant stakeholders is the need of the hour.

Endnotes

- 1 <https://www.oecd.org/investment/globalforum/40315399.pdf>
- 2 Quality of regulation: Perception of stakeholders about clarity in regulatory objective and ability of regulation to achieve desired objective with minimal unintended consequences.

Antitrust in the Digital Era: Rethinking Dominance and its Abuse

Introduction

The digital era in the 21st century presents new and unanticipated challenges for antitrust laws the world over. The challenges posed by the digital era have arisen not just for traditional antitrust domains like the US and Europe but also for emerging market economies such as India. With its seamless character, the burgeoning digital economy has forced antitrust scholars and practitioners to rethink, among other things, the key concept of corporate dominance and its abuse. Contemporary antitrust in most jurisdictions works on the idea that even though the laws themselves are static, their analysis, interpretation, and especially, enforcement take a non-static character.

Given this dynamic characteristic of antitrust activity, an examination of the fundamental concept of dominance — both in its traditional sense and as it relates to the digital era — and a discussion of the challenges that antitrust laws encounter in the digital era is evidently appropriate and warranted. This chapter examines the growth of the digital economy and its corporate titans — globally and in India — and evaluates the implications of that growth and dominance for antitrust analysis and implementation in both Indian and international contexts. The chapter concludes by discussing various challenges that the digital era presents for antitrust regimes, especially in India.

The digital era is the result of the digital revolution that, for all intents and purposes, began in the 1990s. The hallmark of the digital revolution was the development of digital technologies, especially the computer and the internet. The digital cellular phone entered the scene much later in the early 21st century. The digital economy that is part of this digital era is

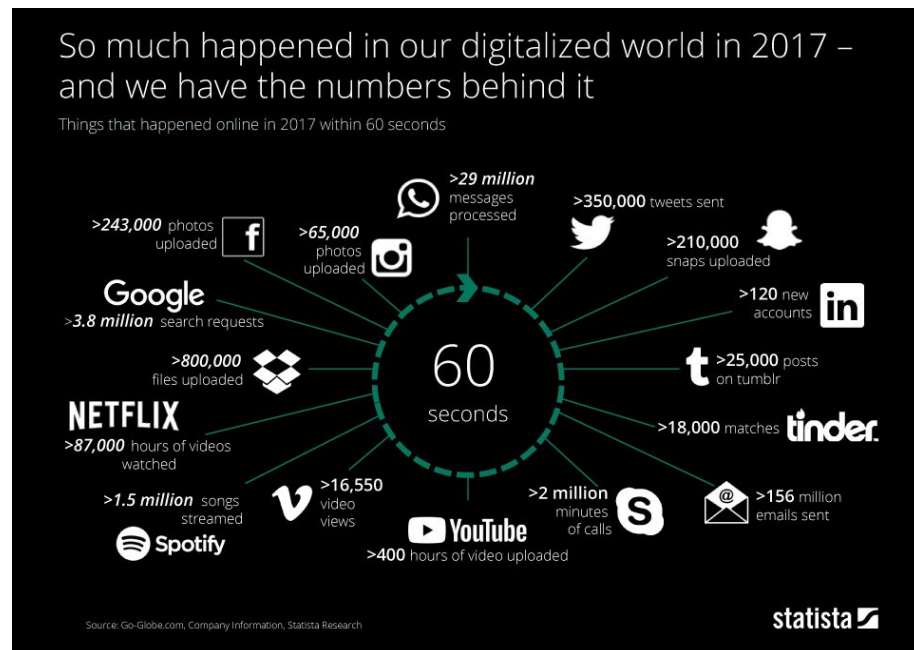
This chapter has been contributed by Raju Parakkal, Ph.D., Associate Professor of International Relations and Chair, CHS Committee on Governance, Thomas Jefferson University, Philadelphia

based on these digital technologies and have come to be also known as the internet economy or the online economy.¹ There is no settled definition of the digital economy but, very broadly, the digitalisation of economic activity can be understood as “the incorporation of data and the internet into production processes and products, new forms of household and government consumption, fixed capital formation, cross-border flows and finance.”²

And, in a very narrow sense, the digital economy can refer to “online platforms, and activities that owe their existence to such platforms.”³ In this chapter, we understand digital economy and digital era as beginning with the narrow definition in terms of online platforms but also including aspects of the broad definition in terms of the connections of these platforms with other domains of the traditional economy.

One challenge that is marking the boundaries of the digital economy is the fact that it is increasingly interwoven with the physical or offline economy.⁴ Many retailers, such as Wal-Mart, Target, and Staples in the US, operate both as online and brick-and-mortar stores providing complementary services between the digital and traditional economies.⁵ It is evident, therefore, that the digital and the offline economies have synergies and complementarities

Figure 3.1: The Digital World in 60 Seconds



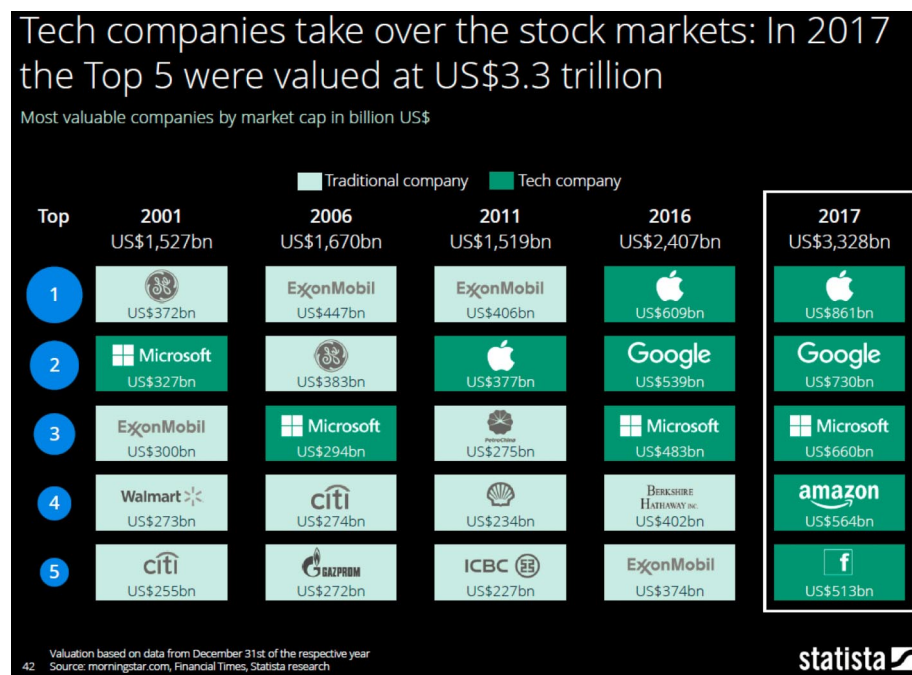
Source: Statista 2018

that prevent a clear demarcation. This characteristic, however, does not mean that the digital economy cannot be conceptualised and operationalised in and of itself for analytical purposes.

The digital era is relevant to antitrust because of the rapid and substantial growth of the digital economy and the competitive and monopolistic effects that this growth has arguably created. There is currently no data on the exact size of the global digital economy, a fact that stems from the challenges of defining such an economy and the absence of worldwide data on digital activities. However, Figure 3.1, which details the extent of human activity on the world's leading digital platforms in a span of one minute, adequately serves to capture the enormity of the digital world.

Since exact economic data on the global digital economy is absent, another way to comprehend the size of the digital economy is to examine the growth of the digital powerhouses. Figure 3.2 illustrates the inter-temporal march of the technology giants to the top of the global corporate ladder, in terms of market capitalisation. Not surprisingly, the success of these tech companies has resulted in a dethroning of the heavyweights from the traditional industries. As the data for 2017 reveal, Apple, Google, Microsoft, Amazon, and Facebook have clearly unseated traditional powerhouses like GE, Walmart, and ExxonMobil.

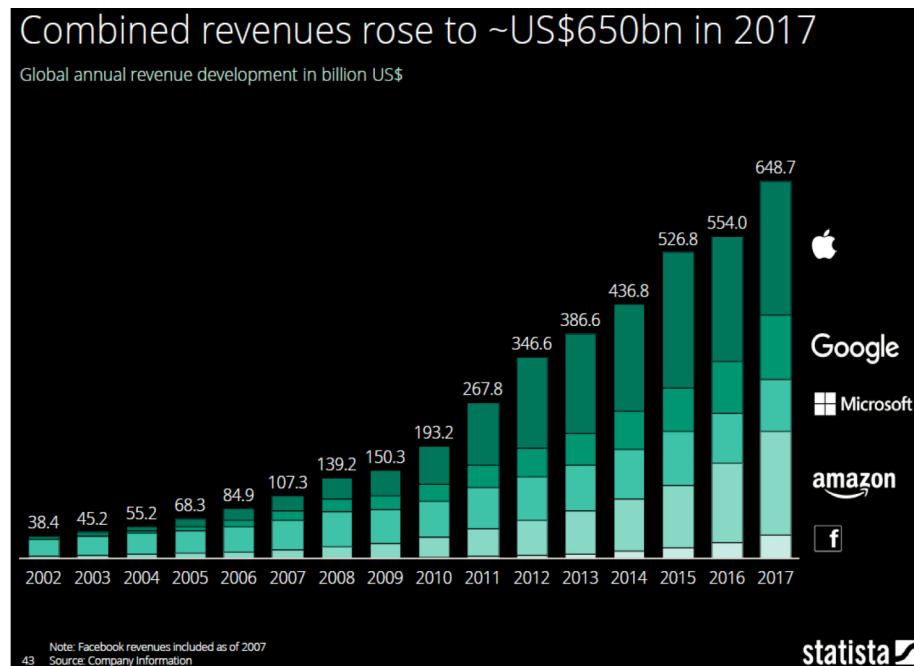
Figure 3.2: The March of the Tech Titans



Source: Statista 2018

Pertinent to antitrust issues is not just the market valuation of these tech giants but how their revenues have grown over this period. Figure 3.3 presents information on the phenomenal growth of revenues of these top five tech firms, which is a staggering 1,689 percentage for the 2002-2017 period for the 'big five' combined. This makes for a combined annual average revenue growth of a seemingly improbable 112 percent during this 15-year period.

Figure 3.3: Rising Revenues for the Big Five, 2002-2017



Source: Statista 2018

As is evident, the digital era is quite prominent in contemporary economic and business life, and that prominence leads to implications for antitrust law and analysis. Of particular relevance is the set of challenges that the digital era raises for an understanding of competition and dominance, especially with the absence of a settled definition of competition among economists and the varied global understanding of dominance in an antitrust context.

Competition, Dominance, and Market Power in Antitrust Analysis: Implications for the Digital Era

One of the anomalies of antitrust analysis is that there exists very little agreement on what exactly competition means in this context. Even though antitrust in current times is driven almost exclusively by economic thinking and analysis, a recourse to economic thought on this anomaly is also surprisingly unhelpful for there is no settled understanding of competition there either. Does competition refer to rivalry, as in multiple market players, or to a market structure where marginal revenue equals, or at least, approximates to marginal cost? Competition laws in the European Union (EU) lean towards the former while American antitrust seeks evidence of competition in the prices of goods and services and not in the number of market players.^{6,7}

In India's Competition Act, 2002, there is no definition provided for 'competition,' although other prominent terms used in the Act are clearly defined. This is evidence of the theoretical ambiguity surrounding the true meaning of this term in an antitrust context. In practice, however, the Competition Commission of India (CCI) arguably appears to be leaning towards the US position based on the consumer welfare standard, as will be explained and discussed later in of this chapter.

These distinctions in the understanding and treatment of competition among major antitrust jurisdictions are relevant for antitrust analysis in the digital age as industries increasingly witness concentration without, in some instances, any evidence of monopoly pricing or any explicit pricing, for that matter. Take, for instance, Google, which has acquired near-monopoly status in the internet search business but offers its services for free to users of their search engine. Very little competition, if it is understood as rivalry among multiple competing players, exists in the internet search business as Google commands around 90 percent of the market share in this activity. However, the lack of this rivalry does not perturb some antitrust authorities because Google's search engine services are free to the users and include multiple features that most users prefer.

One reason why Google, or Facebook for that matter, can offer its principal online services for free is the unique nature of these new economy industries. The main output of many of these new economy industries is intellectual property, which can be expensive to develop initially but result in drastically falling average costs because of the extra or additional cost of producing these intellectual properties — that is, the marginal cost, in technical terms — is almost zero.⁸ These new economy industries also reap the benefits of substantial economies of scale due to the seamless nature of digital businesses.

The unsettled nature of the definition of competition is mirrored in the hazy understanding of dominance. This stems partly from the fact that dominance is a legal concept whose assessment is, however, substantially influenced by economic considerations.⁹ Moreover, there has been a greater focus on the abuse of dominance than on defining dominance itself.¹⁰

One of the more commonly discussed definitions of dominance is the one given by the European Court of Justice in the *United Brands v. Commission* case of 1978 where dominance was understood as “a position of economic strength enjoyed by an undertaking, which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.”¹¹

In terms of understanding the concept of dominance, there are at least two aspects of a dominant position that are contained in this definition that merit attention: first, “the power to behave independently of competitors, customers and consumers” and, second, “the ability to prevent effective competition being maintained on the relevant market.”¹² Together, they allude to the absence of competitive constraints and the presence of substantial market power that is understood as the capacity to profitably increase “prices above the competitive level for a significant period of time.”¹³

This assessment of dominance as leading to market power has significant relevance for the digital era firms in light of arguments that these firms — Amazon and Facebook — wield considerable market power. However, the evaluation of dominance and market power would then require a reconceptualisation because of the need for a *non-price-based* analysis of dominance and market power. To that end, one should pay attention to the following also that the European Court of Justice said in the *United Brands v. Commission* case: “a reduced profit margin or even losses for a time are not incompatible with a dominant position, just as large profits may be compatible with a situation where there is effective competition. The fact that an undertaking’s profitability is for a time moderate or non-existent must be considered in the light of the *whole* of that undertaking’s operations.”¹⁴

The Court also added that “[a] trader can only be in a dominant position on the market for a product if he has succeeded in winning a large part of this market. However, an undertaking does not have to have eliminated all opportunity for competition in order to be in a dominant position.”¹⁵ Taken together, these pronouncements provide us with a reasonable idea of dominance, at least from the perspective of EU competition laws — a dominant position in a market does not mean the non-existence of competitors or the presence of profits, let alone abnormal profits; it just needs a firm

with enough market power to operate without the constraints normally imposed by customers and current and potential competitors.

Furthermore, since ‘dominance’ is a legal concept, “it is important to note that the legal expression ‘dominant position’ is a binary term.”¹⁶ By the binary understanding, a firm is either dominant — and, therefore, subject to scrutiny under competition laws — or it is not dominant and would not come under the competition law radar.¹⁷

Therefore, the ascertaining of dominance assumes tremendous significance, especially considering the fact that there exists *degrees of market power* — all the way from a firm with little or no market power at one end to a true monopolist at the other end, and with firms having ‘some,’ ‘appreciable,’ ‘significant,’ or ‘substantial’ market power between the two extremes.¹⁸ In the context of the digital era and its large digital firms, we argue in the following sections that the assessment of competition, dominance, and market power must, therefore, accommodate *non-price* considerations and other *non-traditional* metrics if we are to truly increase consumer welfare when broadly understood.

The Digital Era and its Challenges for Antitrust Analysis

It is not a coincidence that a mini-antitrust revolution started brewing in the US just as digital firms like Google, Amazon, and Facebook started their ascent to digital supremacy in the 2010s. The antitrust scholars and practitioners at the forefront of this ‘movement’ pointed out the negative outcome of antitrust’s exclusive focus on consumer welfare — understood narrowly in terms of prices (or outputs) — that has led to industry concentration and the increasingly alarming market power of major digital firms like Amazon and Google.¹⁹

Also dubbed as “neo-Brandeisian,” supporters of this movement have highlighted the need for an enhanced role for antitrust to not only battle the monopolistic status of large digital firms but to address wider societal ills such as unemployment, income inequality, political power and wealth accumulation.²⁰

Of particular concern to these supporters is the increasing presence of monopsony power and its effects on labour in these industries. Christened as “hipster antitrust” by traditionalists who still believe in the power and ability of the consumer welfare paradigm to deliver the core goals of antitrust,²¹ this movement has, however, contributed to calls for the re-evaluation of dominance and market power in the digital era. Given this background, we see the ensuing challenges for antitrust analysis in the

digital era to emanate from two major sources: data dominance and network effects from two-sided platforms.

Data Dominance

Data has come to represent one of the hallmarks of the digital era, with associated terms such as big data, data mining, data science and data analytics being tossed around frequently. Data is even regarded as the new oil,²² although somewhat erroneously.²³ As far as antitrust is concerned, what matters is another associated term — data dominance. This is because data dominance leads to market power and market dominance. A key role in data dominance is played by what is known as application programming interfaces, or APIs, that “allow two or more systems to connect and exchange data, both internally and externally, in a controlled manner.”²⁴

APIs have facilitated the gathering of enormous amounts of consumer data that these digital behemoths can potentially use to scuttle competition to the point where calls have arisen for them to be regulated.²⁵ The data gathering process of these digital titans has expanded from consumer preferences and shopping data to geospatial data that serves more than just commercial objectives.²⁶

The London-based Open Data Institute expresses grave concerns over digital companies such as Google, Apple, and Uber turning into data monopolies, as this trove of data can seriously hurt competition by preventing smaller players from successfully competing with the digital titans. However, this once again brings us back to the economic analysis of competition and dominance within the context of the burgeoning digital era, especially with respect to the controversy surrounding the exclusive focus on the consumer welfare standard. This is because competition on digital platforms is markedly different than that among traditional brick-and-mortar outlets since digital stores personalise one’s shopping experience to the point where high switching costs for the shopper negatively affect competition. Online shopping outlets store much more useful information and shopping history, which has the potential to inhibit competition by increasing consumers’ switching costs.

In this context, the question arises whether the possession of vast amounts of monetisable consumer data by digital stores and platforms — that is, data dominance — qualify as an instrument for market dominance. In one sense, this data represents a tool for dominance and limiting competition, as discussed earlier. On the other hand, this wealth of information can be mined to increase consumer welfare by tailoring product availability and prices to suit consumer preferences and choices.²⁷

Two-Sided Markets and Network Effects

As complicated as data dominance might sound, it pales in comparison to the complexity of antitrust analysis that arises from the increasing instances of two-sided or multi-sided platforms that inhabit the digital world. Two-sided markets, and the more general multi-sided markets, are not entirely new or unique to the digital age, although scholarly interest in them has soared in recent decades.²⁸

Two-sided markets are distinct from the traditional and more common one-sided markets in that they link buyers and sellers (“end-users”) on a ‘platform’ that charges the two sides appropriately.²⁹ Examples of two-sided markets abound — for example, dating clubs, airports, flea markets and even academic journals.³⁰

They are in fact an extension of the traditional concept of ‘network externalities’ or ‘network effects,’ which are outcomes that materialise when users of a service or product become a network and the bigger the network the more value, or welfare, the users derive from that service or product. A dating club, for example, provides more welfare to its customers if more end-users join as it will increase the probability of finding a date by increasing choice and availability of potential dates. For at least two reasons, two-sided platforms have serious antitrust implications. First, digital technologies have vastly increased the number of platforms and the ease of conducting business on these platforms. Antitrust comes into this picture due to the potential anti-competitive effects of the ‘network externalities’ that increasingly characterise major digital platforms such as Facebook, Amazon, and Google.³¹

While there is an argument that these network externalities increase consumer welfare, it is becoming evident that large digital entities with products and services in multiple segments — Google being a prime example of this — derive at least a non-trivial, if not substantial, amount of monopoly power and dominance from the presence of these externalities. The size and scale of operations that these network effects have created according to the digital giants, is a market condition where actual and potential competitors find it impossible to compete against these dominant firms. From an antitrust perspective, one could pose the question: if consumer welfare is increasing from lowered prices — or no prices, in some cases — and increased choice and availability, why should this network-effects propelled dominance of major two-sided platforms matter? That would depend on how we analyse antitrust cases involving platforms, which segues to the second reason why two-sided markets have serious antitrust implications.

Although two-sided markets are not new, their antitrust analysis is, especially relative to other scholarship in antitrust. The concern for antitrust,

therefore, is the need for the courts to get the economic analysis right when ‘platform cases’ turn up before them.³² In other words, two-sided markets and platforms should be given an antitrust analysis that befits two-sided markets and not one-sided markets.³³

However, implicit within this argument is a reference to the fundamental understanding of the concepts of dominance and market power. In the *US v. American Express* case of 2018, the Supreme Court averred — while upholding the Second Circuit court’s ruling in favour of American Express amid complaints, the card-services company had engaged in antitrust violations with its vertical restraints on merchants — that “plaintiffs bear the burden of establishing a relevant market and a company’s market power in that market, even when relying on direct evidence of competitive harm, like price increases, to support their claims. Without a definition of the market...a fact finder cannot assess whether the restraints or their alleged effects pose an actual risk to competition.”^{34, 35}

In the context of burgeoning digital economies where digital platforms are increasingly two-sided markets, this ruling signals the overwhelming implications and significance for the correct — and even a revised — definition and understanding of market dominance and market power, and equally importantly, for the correct identification of the relevant market.³⁶

The implications of this landmark case for the antitrust analysis of dominant platforms and for a rethinking of dominance in the digital era are evident from some of the reactions following this judgment: “The Supreme Court’s decision risks shielding from effective antitrust scrutiny every dominant tech platform in America, including Amazon, Google, and Facebook”³⁷ and “The decision would...shift control over markets away from individual buyers and sellers to companies, including internet platforms such as Google and Facebook, that bring them together.”³⁸

Our biggest concern of how this decision will affect antitrust everywhere, going forward, is that if digital firms are increasingly going to be evaluated as two-sided markets, then already-dominant digital platforms like Amazon, Google, and others could further use the argument of the multi-sided market to secure favourable decisions in seemingly tough-to-win dominance cases. In this scenario, once the market is identified as two-sided, the case could turn on the application of the consumer welfare standard that would supersede all other available evidence of anti-competitive conduct, such as harms to rivals and suppliers. The repercussions of this monumental decision will, undoubtedly, affect the analysis of dominance and its abuse in the digital age.

Antitrust and Dominance in the Digital Era: India's Early Experience

The Indian economy is very much in the thick of the digital age, although it also has much uncharted digital territory to explore. Estimates show that the number of internet users in India hit 500 million as of 2018.³⁹ This is close to 40 percent of the total population, signaling space for further growth in internet connectivity and digitalisation. Even though digital penetration in the nation is still low at around 65 percent in urban India and 20 percent in rural India, the country has started experiencing the effects of the digital economy.⁴⁰ The digital economy in India clocked a size of US\$413bn in 2018, with expectations to more than double to US\$1tn by 2025.⁴¹ All of these numbers augur well for a fast-paced growth of the country's digital economy. This trajectory, however, also heralds the emergence in India of some of the dominance and market identification issues already seen in other antitrust jurisdictions.

Early instances of this, which provide insights into the thinking of the CCI, India's competition authority, concerning dominance in the digital era, are the multiple cases of dominance against Google that were investigated and decided by the Commission over a four to six-year period.⁴² In the cases involving Bharat Matrimony and Consumer Unity & Trust Society from 2012, the CCI found Google guilty of abuse of "dominance in the market for online general web search, to strengthen its position in the market for online syndicate search services."⁴³

Essentially, the CCI fined Google for using its dominance in online search services to unfairly compete against online providers of other services, which in this case was flight search services. In the case from 2014, the CCI found that Google was dominant in the "Market for Online Search Advertising Services in India," the relevant market identified by the CCI, but that it did not abuse its dominance or inflict any harm to the complainants on the specific issues raised in the case. In early 2019, it was reported that the CCI began a separate review of whether Google abused its popular and market-leading Android mobile operating system to block its rivals in associated markets like mobile search services and browsers.⁴⁴

India's antitrust challenges concerning dominance in the digital economy stem largely from the new platform markets that have emerged prominently in Indian business and economy, namely, online marketplaces like Flipkart (now foreign-owned by Walmart), Amazon, and Snapdeal. One potential competition issue on digital platforms that was effectively quashed by the Indian government in December 2018 was the requirement for e-commerce companies to not sell their own products on their online marketplaces.⁴⁵ This, however, has resulted in the disappearance of low-priced Flipkart and Amazon-branded items and consequently to a lot of customer dissatisfaction.⁴⁶

Evidently, the removal from the platforms of their own products, and also of products from enterprises, in which these platforms have a stake, have partly addressed the issue of platform dominance. This development must, however, be seen in light of the decision by the CCI a month earlier in November 2018 where the antitrust authority dismissed complaints lodged by the All India Online Vendors Association (AIOVA), an online sellers' association, that alleged that Flipkart was abusing its dominant position in the e-commerce platform market by favouring certain sellers and the platform's own products.^{47, 48}

The CCI, however, did not side with the AIOVA and ruled that "looking at the present market construct and structure of online marketplace platforms market in India, it does not appear that any one player in the market is commanding any dominant position at this stage of evolution of the market."⁴⁹

Two important points contained in the CCI's order that are relevant for the present examination are that, first, the plaintiffs failed to produce credible evidence that Flipkart had a dominant position in the online e-commerce marketplace and, second, that "the marketplace based e-commerce model is still a relatively nascent and evolving model of retail distribution in India and the Commission is cognisant of the technology-driven nature of this model."⁵⁰

The Commission added that "[r]ecognising the growth potential as well as the efficiencies and consumer benefits that such markets can provide, the Commission is of the considered opinion that any intervention in such markets needs to be carefully crafted lest it stifles innovation."⁵¹

The key, unanswered question in this context is whether the Commission would have ruled differently if there was evidence produced by the plaintiffs that Flipkart was indeed a dominant e-commerce player according to the definition and standards of a dominant position contained in the Competition Act, 2002.⁵²

These pronouncements from the CCI, combined with the understanding gained from the Commission's order in Cases No. 6 & 74 of 2015 concerning dominance issues in the market for radio taxi services in Bengaluru,⁵³ provide an insight into the thinking of the Commission with regard to issues of platform dominance in the digital era in India.

First, the Commission appears to be adopting a consumer welfare standard based on an efficiency argument. This is largely in line with the paradigm in many global antitrust jurisdictions, most notably, the American one.

Second, the CCI is reluctant to intervene in nascent markets lest it interferes with the latest innovations and the organic evolution of these platform markets. The impression we get from these relevant orders is that India's antitrust authority is increasingly adopting a *laissez-faire* attitude towards the new economy of digital businesses while at the same time providing legal justifications through recourse to the Competition Act, 2002, and case law from other antitrust jurisdictions.

Third, market share is not the only or even the major factor the CCI is willing to entertain in the determination of a dominant position. The authority has strongly advocated for a holistic approach in this regard.⁵⁴ Fourth, the Commission clarified that according to the Competition Act, 2002, there can be only one dominant player in a particular relevant market.⁵⁵ This has implications for the determination of dominance in digital platforms where there are arguably multiple 'dominant' players. Finally, and perhaps most importantly, on the topic of competition, the Commission does not see it in terms of rivalry between firms. The number of firms in a relevant market is not a factor in the Commission's determination of the competitive state of that market.⁵⁶ This is in line with its demonstrated emphasis on the consumer welfare paradigm that eschews the need to stipulate a minimum number of players to ensure competition in a relevant market.⁵⁷

Dominance in the Digital Era: Time and Reasons to Rethink

For both Indian and global antitrust, the digital era provides many challenges, for a variety of reasons. Digital dominance is an economic, social, and political reality.⁵⁸ The traditionalists still contend that current antitrust laws have the capacity to handle dominance issues, including in the new digital economy. There is some truth to that argument, as seen from the CCI decisions that were discussed previously. However, as discussed in Sections 2 and 3 earlier, we feel there are aspects of the growing digital age that call for a rethinking on dominance and market power in antitrust analysis.⁵⁹ And, such a rethinking will require that we start at the beginning, that is, by looking at the goals of antitrust.

Ever since the Chicago School and Justice Robert Bork changed American antitrust in the 1970s and 1980s to an almost exclusive focus on consumer welfare based on price theory,⁶⁰ the paradigm has become sacrosanct not only in American antitrust cases but also in many other antitrust jurisdictions. India's Competition Act, 2002 has competition as a key goal, along with protecting the interests of consumers and ensuring the freedom of trade of market competitors. While the consumer welfare standard eliminated the multiple and sometimes confusing goals of antitrust, it has inadvertently led to a myopic understanding of antitrust.

It is our argument that an exclusive focus on consumer welfare while ensuring parsimony and clarity in antitrust goals, does not ensure a win for the larger purpose of antitrust that at its inception rightfully consisted of a broader set of ideals.⁶¹ The economic theorising and analysis that underpins the consumer welfare paradigm have, no doubt, enriched antitrust analysis. It has, however, created a ‘dominance’ (pun intended) of its own to the effective elimination and abandonment of other goals of antitrust, as evidenced by the decisions of the antitrust authorities in the Indian and US antitrust cases discussed earlier. The argument is not to altogether jettison the consumer welfare standard but to consider it as one among many ‘competing’ (pun intended, again) goals of antitrust, as practiced, observed and enforced.

The rethinking of the primary goals of antitrust and the attendant call for a departure from an exclusive focus on consumer welfare is necessitated by the influence this focus has on the determination of dominance on digital platforms like Amazon and Google. If consumer welfare is the sole objective of antitrust laws, then newer standards of digital dominance, such as data dominance and platform network effects, fail to find a decisive role *in and of themselves* in the determination of market power and dominance, based on contemporary economic reasoning pertaining to consumer welfare. Part of the reasons for sidelining these newer standards of digital dominance is the inability to produce convincing data and sound economic analysis to demonstrate how these newer standards effectively lead to a dominant position, and therefore, to anti-competitive effects. The logical extension of this line of argument is that the understanding of ‘dominant position’ should be either changed in the antitrust laws or in the practical determination of such a position to include data dominance and platform network effects as conclusive measures of dominance.⁶²

A major issue with ignoring these standards of dominance and focusing only on prices (or outputs) is that it ignores the market power that comes with being a dominant entity even though that entity may not be abusing its dominance as understood in contemporary antitrust thinking and analysis. The argument here is that a demonstrable and measurable abuse of dominance using current analytical practices is not the only criterion to trigger antitrust action. The mere fact that a digital firm has a dominant position — regardless of whether it is abusing that dominance or not — is sufficient to *effectively* produce an anti-competitive environment in the relevant market. The scale and complexity of digital entities that have acquired dominant positions in their respective markets require that elements of their dominance, such as data monopolies and network effects, be ‘relaxed’ to an extent where the probability of effective competition — whether from existing or potential rivals — occurring in the relevant market is substantially enhanced. As is clear, this is not an argument for breaking

up these dominant entities, as some scholars and policymakers have proposed, but to strip off some of the elements of that dominance or to make them commonly available.⁶³

It is not inconceivable, with the economic tools and reasoned logic at our disposal, to determine adequate levels of such aspects of dominance that would permit continuous growth of digital platforms while deterring the formation and continued simmering of dominance issues and anti-competitive effects in the digital economy.

The digital era and issues of dominance and market power of the tech titans also present questions for the relationship between antitrust and socio-political factors like personal privacy, labour rights, and democracy, and advocate for the need to rethink dominance and the overall approach to antitrust in the digital age.⁶⁴ The issue related to personal privacy has connections to the earlier discussion on data dominance. Although individualised data has helped consumers reap rewards in the form of targeted online advertisements and helpful shopping advice, the availability of vast swathes of personalised data at the disposal of a few major firms is cause for concern. This is particularly so when major online retailers and businesses have been victims of malicious hacking, resulting in the loss of their customers' sensitive personal information.

At a micro level, the tracking by these digital firms of an individual's every online movement — and even offline activities via smartphone applications — has become a normal practice. The deleterious effects of these leaks are more pronounced due to the centralised nature of the data storage where hacking of a major online retailer reveals substantial personal data about an individual. An even more terrifying concern and the core of the moral and philosophical argument is the power that this personalised data provides the tech giants, whether they abuse them or not.

At the global level, and particularly relevant for developing countries like India is the case of the digital divide between developed and developing countries and the constant efforts by the digital giants to “use all their power to achieve a global regime, in which small nations cannot regulate either data extraction or localisation.”⁶⁵ Issues of personal privacy and the abuse of personal data are directly related to dominance in the digital era at all levels — individual, national, and global.

The monopsony power of these digital behemoths has especially attracted tremendous attention for its impacts on labour markets.⁶⁶ In the absence of a rethinking of dominance and of a departure from an exclusive focus on narrowly-defined consumer welfare, the increasing concentration in digital markets is bound to severely affect employees' ability to switch employers

and receive wages that at least match the value of their marginal output. There is already evidence from the US of high labour market concentration and consequently, lower wages, arguably arising from the exercise of monopsony power in the wake of antitrust analysis focused solely on consumer welfare and nothing else.⁶⁷

The digital platform markets are increasingly witnessing the tech giants acquiring smaller tech companies that display the potential to be an eventual competitor,⁶⁸ which is a practice that encourages and maintains a state of monopsony power in digital labour markets. We would advocate that antitrust analysis of dominance in digital markets be cognizant of the monopsony effects that these decisions have on labour and wages.

The most perceptible political impact of the march of the digital giants has been felt in the democratic sphere where that sacred pillar of democracy — fair and competitive elections — has been severely affected due, primarily, to two main impacts — fake news and economic power. The digitalisation of communications resulted in easier and inexpensive dissemination of news, including fake and false news, which influenced voters' perceptions of candidates running for office in most democratic countries.⁶⁹

The dominance of digital entities enters the political calculus as they hold large amounts of individualised data on citizens and voters, making them vulnerable and more effective targets of both bots and real humans who function as purveyors of fake and misleading information. This subverts the electoral process and presents massive challenges to democracy and democratic institutions. Related to the problem of digital dominance, facilitating targeted and effective dissemination of fake news, is the long-held knowledge of the democratic injuries that could result from the concentration of economic power.⁷⁰ History teaches us of the role of monopolistic power in supporting fascism in Nazi Germany in the 20th century.⁷¹

Not too long ago, in a highly influential article on the connections between politics and antitrust laws, Robert Pitofsky warned us of the dangers of denying a place for political values in antitrust laws and analyses.⁷² The sustenance of concentrated economic power invariably demands a subversion of democratic values through a corporate seizure of political power and influence. Unfortunately, in modern times, we are left with the same concerns regarding the “curse of bigness,” as corporate dominance — especially in big tech and the digital economy — portend democratic harms by increasing inequality and the sense of powerlessness among ordinary citizens.⁷³

Most paradoxically, ignoring democratic concerns in the conduct of antitrust policy would have an ironic outcome as Pitofsky warned many decades ago: “If the free-market sector of the economy is allowed to develop under antitrust rules that are blind to all but economic concerns, the likely result will be an economy so dominated by a few corporate giants that it will be impossible for the state not to play a more intrusive role in economic affairs.”⁷⁴

There is increasing evidence in some of the major democracies of the world — chiefly, India and the US — that the rising dominance in the digital era is generating said democratic pressures and harms. It might be time to acknowledge that “[i]t is bad history, bad policy, and bad law to exclude certain political values in interpreting the antitrust laws.”⁷⁵

Conclusion

Going forward, we expect both Indian and international antitrust authorities to be challenged by the following questions and concerns in the context of dominance issues related to the digital economy. Some of these concerns might be more pronounced for Indian antitrust, based on some of the idiosyncratic challenges present in the country’s political economy and the relatively young nature of its antitrust regime.

First is the question of two-sided markets and whether an alleged violation calls for one-sided or two-sided market analysis. Are all digital platforms by definition two-sided markets? E-commerce sites like Amazon, eBay, Airbnb and Flipkart are obvious, or in antitrust parlance, *per se*, two-sided markets. But what about services like Netflix, which is sometimes called a programming platform? Or, Facebook and Google, which have some aspects of their business models that can be argued to be one-sided and other aspects that lend themselves to being two-sided markets? As we learned from *US v. American Express*, determining whether an alleged antitrust violation occurred in the context of a one-sided or two-sided market is not a straight-forward exercise and requires careful analysis of the particularities of the relevant market. As such, this market determination is going to be a major battle for antitrust jurisdictions and stakeholders everywhere in the digital era.

Second, we can expect repeated and emphatic challenges to the consumer welfare standard in the antitrust analysis of dominance issues in the digital era. These challenges will not only be from the plaintiffs but also from political leaders and civil society. Antitrust laws and their applications do not exist in a vacuum and the socio-political environment exerts as much influence on issues of market power and corporate dominance as do economic factors. These movements are already being witnessed in the US with left-leaning lawmakers in the US Congress already making known

their intentions to tackle dominance by digital titans like Amazon, Facebook and Google by breaking them up.⁷⁶

There is no reason to believe that such trends will not become global in digital markets where said firms are slowly but surely acquiring prominent and near-dominant positions in a context where the present application of competition laws do not address the growing issue of rising corporate power. For India, it will be a hard choice for the CCI between taking an interventionist stance on digital dominance versus letting the markets, especially the consumers' side, decide whether any digital dominance is indeed manifesting itself in the form of an abuse of that dominance. Based on recent evidence, we expect the CCI to adopt the latter stance, for it is apparent that the CCI does not wish to exert any extraneous and distortionary influence on evolving technologies in nascent digital markets.

Third, data availability across the economic sphere would assume increased importance, especially when cases demand proper analysis of two-sided platforms, for which copious data is a must. For example, recall the American Express ruling where the US Supreme Court considered increased credit card transaction volumes as a sign of rising consumer welfare, although retail prices actually went up, arguably, due to the practices of American Express. The inability to provide data and information by the DOJ on these price increases and the consumer harms that resulted from them led the Court to rule in favour of American Express.

And, in India, if the CCI follows the same path in the context of cases involving abuse of digital dominance, then such antitrust cases in India will require the availability and use of vast amounts of relevant price, quantity and consumer data. For a country like India, where data availability has traditionally been a matter of concern but where the CCI is quite rightly adopting an evidence-based antitrust analysis, it would be prudent to invest in legal and institutional frameworks that encourage and facilitate the greater collection, dissemination, and analysis of relevant data for antitrust analysis.

A final concern would be the increasing use of artificial intelligence and tacit algorithmic collusion where benefits from “virtual competition” are questionable even though the markets might appear competitive by the standards of the set of analytical tools we possess in contemporary antitrust.⁷⁷ This would be of major, although not insurmountable, concern to countries like India that possess a shorter history of modern antitrust legislation and enforcement but that, nevertheless, experience the same effects of the digital era as the more traditional antitrust jurisdictions like the EU and the US. Plugging that asymmetric gap would be an immediate challenge for antitrust jurisdictions in most developing countries and not just in India.

There is very little doubt that antitrust analysis and the determination of dominance can continue as they have been in the past. The digital era is placing substantial pressure on the antitrust community and policymakers to demand changes. Antitrust should no longer be only about consumers in the relevant market because the impact of its decisions extends beyond consumers to the larger society. The implications of digital dominance in the new economy go beyond just economics and business. For all that we know, antitrust laws might be the last bulwark to prevent a complete digital takeover of our societies. And, we must put these laws to good effect without sapping the vitality and innovativeness of the digital era. It is very much possible. But it begins first by recognising that we have a fast emerging problem of digital dominance.

References

- Avila, Renata and Burcu Kilic. 2017. "Digital Giants are Trading Away our Right to Privacy." *Open Democracy*, Dec 13, 2017. <https://www.opendemocracy.net/en/digital-giants-trading-away-our-right-to-privacy/>
- Azar, José, Ioana E. Marinescu, and Marshall Steinbaum. 2018. "Labor Market Concentration." <https://ssrn.com/abstract=3088767>.
- Balto, David and Lane, Matthew. 2018. "'Hipster Antitrust' Movement is all Action, no Plan." <https://thehill.com/opinion/judiciary/378788-hipster-antitrust-movement-is-all-action-no-plan>.
- Brandeis, Louis. 1914. "A Curse of Bigness." *Harper's Weekly*, January 10, 18-21.
- Chakravorti, Bhaskar. 2018. "Competing in the Huge Digital Economies of China and India." *Harvard Business Review*. <https://hbr.org/2018/11/competing-in-the-huge-digital-economies-of-china-and-india>.
- Corbin, Kenneth. 2019. "Warren Wants to Break Up Amazon, Facebook, Google." *Forbes*, March 8, 2019.
- Crane, Daniel. 2018. "Antitrust and Democracy: A Case Study from German Fascism." *Law & Economics Working Papers*. https://repository.law.umich.edu/law_econ_current/155.
- Currier, James. 2017. "70% of Value in Tech is Driven by Network Effects." <https://medium.com/@nfx/70-of-value-in-tech-is-driven-by-network-effects-8c4788528e35>.
- Epstein, Robert. 2018. "Manipulating Minds: The Power of Search Engines to Influence Votes and Opinions." In *Digital Dominance: The Power of Google, Amazon, Facebook, and Apple*, edited by Martin Moore and Damian Tambini, 294-319. New York, N.Y.: Oxford University Press.
- Ezrachi, Ariel and Maurice E. Stucke. 2016. *Virtual Competition*. Cambridge, MA: Harvard University Press.
- Financial Times. 2019. "India's Ecommerce Law Forces Amazon and Flipkart to Pull Products." *FT.Com*, Feb 1, <https://www.ft.com/content/29a96ff6-2615-11e9-8ce6-5db4543da632>.
- Ford, George S. 2018. "'Hipster' Antitrust Meets Two-Sided Markets." <https://www.bna.com/hipster-antitrust-meets-n57982091307/>.
- Geradin, Damien, Paul Hofer, Frederic Louis, Nicolas Petit, and Mike Walker. 2005. "The Concept of Dominance in EC Competition Law." <http://hdl.handle.net/2268/5829>.

- IMF. 2018. "Measuring the Digital Economy.", accessed Feb 26, 2019, <https://www.imf.org/~media/Files/Publications/PP/2018/022818MeasuringDigitalEconomy.ashx>.
- Iyer, Bala and Getchell, Kristen. 2018. "Why APIs should be Regulated." MIT Sloan Blogs. Massachusetts Institute of Technology, Cambridge, MA. <https://sloanreview.mit.edu/article/why-regulate-digital-organizations-apis/>.
- Khan, Lina M. 2017. "Amazon's Antitrust Paradox." *Yale Law Journal* 126 (3): 710-805.
- Khan, Lina and Sandeep Vaheesan. 2017. "Market Power and Inequality: The Antitrust Counterrevolution and its Discontents." *Harvard Law & Policy Review* 11 (1): 235-294. <https://search.proquest.com/docview/1872562091>.
- Kolasky, William J. 2004. "What is Competition? A Comparison of U.S. and European Perspectives." *The Antitrust Bulletin* 49 (1): 29-53. <http://www.econis.eu/PPNSET?PPN=391584243>.
- Lynn, Barry. 2018. "The Amex Ruling Cements the Domination of Big Companies." *Financial Times*, June 27, 2018. <https://www.ft.com/content/459797ea-79e2-11e8-af48-190d103e32a4>.
- Marinescu, Ioana Elena and Eric A. Posner. 2018. "A Proposal to Enhance Antitrust Protection Against Labor Market Monopsony." <https://ssrn.com/abstract=3317575>.
- Mitchell, Stacey. 2018. "With Antitrust Ruling, Supreme Court Underscores Need for New Anti-Monopoly Movement." <https://ilsr.org/supreme-court-american-express-strike-down-antitrust/>.
- Moore, Martin and Damian Tambini. 2018. "Introduction." In *Digital Dominance: The Power of Google, Amazon, Facebook, and Apple*, edited by Martin Moore and Damian Tambini, 1-18. New York, NY: Oxford University Press.
- Orbach, Barak. 2013. "How Antitrust Lost its Goal." *Fordham Law Review* 81 (5): 2253-2277.
- Pitofsky, Robert. 1979. "The Political Content of Antitrust." *University of Pennsylvania Law Review* 127: 1051-1075.
- Posner, Richard A. 2014. *Economic Analysis of Law*. 9. ed. Austin, TX: Wolters Kluwer Law & Business.
- Quinn, Thomas E. and Stone, Richard L. 2018. "The Supreme Court's Decision in Amex: What it Means for Vertical Arrangements and Platform Businesses." <https://www.lexology.com/library/detail.aspx?g=1ed1f50a-c427-4206-8d1f-ade3e4cbde2c>.

- Ram, Aliya and Madhumita Murgia. 2018. *Force Google, Apple and Uber to Share Mapping Data, UK Advised*. London: The Financial Times Limited.
- Rochet, Jean-Charles and Tirole, Jean. 2004. "Two-Sided Markets: An Overview." http://web.mit.edu/14.271/www/rochet_tirole.pdf.
- Schechter, Asher. 2017. "Is there a Case to be made for Political Antitrust?" <https://promarket.org/case-made-political-antitrust/>.
- Schlosser, Adam. 2018. "You may have Heard Data is the New Oil. It's Not." <https://www.weforum.org/agenda/2018/01/data-is-not-the-new-oil/>.
- Silverthorne, Sean. 2006. "New Research Explores Multi-Sided Markets." <https://hbswk.hbs.edu/item/new-research-explores-multi-sided-markets>.
- Statista. 2018. *Digital Economy Compass 2018*. <https://www.statista.com/study/52194/digital-economy-compass/>
- Stucke, Maurice E. 2013. "Is Competition always Good?" *Journal of Antitrust Enforcement* 1 (1): 162-197.
- The Economic Times. 2019. "Competition Commission Probes Accusations that Google Abused Android." <https://economictimes.indiatimes.com/tech/internet/competition-commission-probes-accusations-that-google-abused-android-sources/articleshow/67958930.cms>.
- The Economic Times. 2018a. "E-Commerce Norms Get Tweaked, Stakeholders Can't Sell Products on Own Site." <https://economictimes.indiatimes.com/news/economy/policy/e-commerce-norms-get-tweaked-stakeholders-cant-sell-products-on-own-site/videoshow/67259130.cms?from=mdr>.
- The Economic Times. 2018b. "Flipkart, Amazon Not Dominant Hence Not in Contravention of Competition Act: CCI." <https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/flipkart-amazon-not-dominant-hence-not-in-contravention-of-competition-act-cci/articleshow/66534244.cms>.
- The Economist. 2017. "The World's Most Valuable Resource: Regulating the Data Economy." May 6, 2017.
- Times of India. 2018. "Number of Indian Internet Users Will Reach 500 Million by June 2018, IAMAI Says." <https://timesofindia.indiatimes.com/business/india-business/number-indian-internet-users-will-reach-500-million-by-june-2018-iamai-says/articleshow/62998642.cms>.
- Valentino-DeVries, Jennifer, Jeremy Singer-Vine, and Ashkan Soltani. 2012. "Websites Vary Prices, Deals Based on Users' Information." *Wall Street Journal (Online)*, <https://www.wsj.com/articles/SB10001424127887323777204578189391813881534>.

Van Gorp, Nicolai and Batura, Olga. 2015. "Challenges for Competition Policy in a Digitalised Economy." http://www.europarl.europa.eu/RegData/etudes/STUD/2015/542235/IPOL_STU%282015%29542235_EN.pdf.

Whish, Richard and David Bailey. 2018. *Competition Law*. Ninth ed. Oxford: Oxford University Press.

Wright, Joshua D., Elyse Dorsey, Jan Rybníček, and Jonathan Klick. 2019. "Requiem for a Paradox: The Dubious Rise and Inevitable Fall of Hipster Antitrust." https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3249524.

Wright, Julian. 2004. "One-Sided Logic in Two-Sided Markets." *Review of Network Economics* 3 (1): 44-64.

Wu, Tim. "The Supreme Court Devastates Antitrust Law." *New York Times*, June 26, 2018. <https://www.nytimes.com/2018/06/26/opinion/supreme-court-american-express.html>.

Endnotes

- 1 Van Gorp and Batura (2015)
- 2 IMF (2018: 6)
- 3 IMF (2018: 7)
- 4 Supra Note 1
- 5 For example, in many countries, customers have the option to order online and pick up their orders in stores. Some online stores even provide their offline inventory information on product availability so customers can decide which particular physical store location to visit. A reverse example of the incorporation of the digital economy into the traditional economy is the facility offered by some offline stores for customers to use their store locations to order online those products that are currently unavailable in their physical stores and have them shipped to either their homes or a particular store location.
- 6 For example, Whish and Bailey (2018: 4) draw on the UK Merger Assessment Guidelines to describe competition as “a struggle or contention for superiority, and in the commercial world this means a striving for the custom and business of people in the marketplace: competition has been described as ‘a process of rivalry between firms...seeking to win customers’ business over time’.”
- 7 See Kolasky (2004) for a discussion of the American understanding of ‘competition.’
- 8 Posner (2014).
- 9 Geradin et al. (2005)
- 10 *Ibid*
- 11 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:61976CJ0027>. India’s Competition Act, 2002, follows the same understanding of a dominant position in Section 4 of the Act.
- 12 Geradin et al. (2005: 3)
- 13 Whish and Bailey (2018: 187)
- 14 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:61976CJ0027>. Emphasis added.
- 15 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:61976CJ0027>.
- 16 Supra Note 12
- 17 Whish and Bailey (2018)
- 18 *Ibid*
- 19 See Khan (2017) and Khan and Vaheesan (2017)
- 20 Balto and Lane (2018)
- 21 Wright et al. (2018)
- 22 The Economist (2017)
- 23 According to Schlosser (2018), it is erroneous to treat data as oil for a variety of reasons. First, oil has more or less a fixed supply while data is being produced at an unimaginable pace and has no corresponding scarcity. Second, the cost of generating data is miniscule compared to the cost of extracting oil from new

locations. Third, oil is a single-use commodity while data can be reused and shared multiple times for a variety of purposes. Fourth, combining data from different sources adds quality to the data and the insights it can produce, while adding oil extracted from different locations does nothing to the quality of the oil. Finally, unlike oil, the real value of data consists in ‘making it speak,’ that is, in the insights generated from it through analytics and combining with other complementary or supplementary data. Regardless of these vital differences, the popular comparison of data to oil attests to the status, power, and significance that data has acquired in recent decades.

24 Iyer and Getchell (2018)

25 *Ibid*

26 “Geospatial data has become ever more sought after as cities and businesses explore the use of new technologies such as autonomous cars and delivery drones, which rely on detailed maps of the natural environment. Companies such as Google, Apple and Uber have invested millions of dollars in building vast data pools that document everything from landscape features such as waterways and roads to data on how traffic flows, how land is used and where boundaries lie” (Ram and Murgia 2018).

27 There is, however, some evidence to show that the routine practice of price discrimination has been enhanced by the digital companies with the availability of more precise and targeted data and has hurt consumers through the previously-theoretical but currently practical step of “first-degree price discrimination” where a company can charge a different price for every single unit of a product or service it sells. Contrast this with the more common practices of second-degree and third-degree price discriminations where companies charge different prices for different quantities purchased (for example, a price discount for a larger volume of purchase) and different prices for different groups of consumers (for example, lower prices for students and senior citizens), respectively. From an antitrust perspective, the price discrimination by Staples Inc in the US that was reported in 2012 by a group of Wall Street Journal reporters is illustrative in this context. Staples.com charged different prices for the same stapler to two different online customers located a few miles apart simply because the customer who received the higher price was not located near a major Staples competitor like OfficeMax or Office Depot Inc. It was found that Staples.com usually charged discounted prices if a rival brick-and-mortar store was within 20 miles or so of the customer’s location. It was also reported that “areas that tended to see the discounted prices had a higher average income than areas that tended to see higher prices” (Valentino-DeVries, Singer-Vine, and Soltani 2012). The counterintuitive positive correlation between lower income areas and higher prices on Staples.com was because lower income areas usually have a lower presence of rivals, and therefore, lower levels of competition for Staples.com, than more affluent locations. This is an early evidence of some of the pernicious effects of data dominance and the resulting instance of first-degree price discrimination that could potentially lead to abuse of dominance and restriction of competition, and also adversely affect weaker sections of society.

28 Silverthorne (2006)

29 Rochet and Tirole (2004)

30 For a longer list, see Wright (2004)

- 31 By one count, approximately 70 per cent of the value creation in the tech industry since 1994 has come from network effects, with the added finding that “having a network effect is the single most predictable attribute of the highest value technology companies” (Currier 2017).
- 32 Ford (2018)
- 33 In this context, a closely watched recent case has been the *US v. American Express* where the outcome largely hinged on whether the credit card business of American Express was understood as a two-sided market with cardholders on one side and card-accepting merchants on the other, or as a one-sided market just between card-accepting merchants and American Express. The US Department of Justice that brought the case argued the relevant market was the latter, that is, an one-sided market. But the court viewed it as a two-sided market and ruled in favour of American Express. For more, see Ford (2018).
- 34 Quinn and Stone (2018)
- 35 It was also the fact that, following the court’s treatment of the case as one requiring a two-sided market analysis, the US Department of Justice failed to show that the restraints American Express imposed on merchants “made all [American Express] customers on both sides of the platform — i.e., both merchants and creditors — worse overall” (https://www.supremecourt.gov/opinions/17pdf/16-1454_5h26.pdf; emphasis in original).
- 36 It has to be mentioned that the 5-4 majority ruling in the American Express case witnessed some ‘novel’ and even bizarre economic arguments advanced by the Court, based on an understanding of “two-sided transactions market.” As Justice Clarence Thomas wrote for the majority, “Visa and MasterCard—two of the major players in the credit-card market — have significant structural advantages over Amex. Amex competes with them by using a different business model, which focuses on cardholder spending rather than cardholder lending. To encourage cardholder spending, Amex provides better rewards than the other credit-card companies. Amex must continually invest in its cardholder rewards program to maintain its cardholders’ loyalty. But to fund those investments, it must charge merchants higher fees than its rivals. Although this business model has stimulated competitive innovations in the credit-card market, it sometimes causes friction with merchants. To avoid higher fees, merchants sometimes attempt to dissuade cardholders from using Amex cards at the point of sale — a practice known as “steering.” Amex places anti-steering provisions in its contracts with merchants to combat this.” Understood differently, it was the Supreme Court’s decision that there was no harm to cardholder welfare from the vertical restraints placed by American Express on the merchants because any harm was compensated by the better rewards that American express offered the cardholders with their particular business model, for which, such restraints were necessary. It is also implicit in these pronouncements by the Court that the plaintiffs had not correctly identified the relevant market as two-sided instead of as one-sided and made their arguments accordingly. Arguably, the most ‘interesting’ part of the ruling and one that has immediate relevance for dominance issues in two-sided platform markets was the Court’s contention that even though American Express raised swipe fees 20 times in five years, thereby increasing retail prices for everyone (including for non-credit card using customers, as retailers pass on the increased fees in the form of increased uniform retail prices), it did not violate antitrust laws because the credit card industry’s “output” in terms of card transaction volumes had gone up (Mitchell

- 2018). While some observers — for example, Ford (2018) — praised the courts for getting the analysis right by treating it as a two-sided platform, others — for example, Lynn (2018) and Wu (2018) — expressed their strong objections to the ruling and its potential for adverse antitrust outcomes in future.
- 37 <https://openmarketsinstitute.org/releases/open-markets-statement-ohio-v-american-express/>
- 38 Lynn (2018)
- 39 Times of India (2018)
- 40 *Ibid*
- 41 Chakravorti (2018)
- 42 Case No. 07 of 2012, M/s Consim Info Private Limited v. M/s Google Inc., USA and M/s Google India Private Limited; Case No. 30 of 2012, Consumer Unity & Trust Society (CUTS) v. M/s Google Inc., USA and M/s Google India Private Limited; Case No. 06 of 2014, Shri. Vishal Gupta v. Google LLC, Google Ireland Limited, and Google India Private Limited; Case No. 46 of 2014, Albion InfoTel Limited v. Google LLC, Google Ireland Limited, and Google India Private Limited. The first two and last two cases were administered together as two pairs of two cases each and joint orders issued for each pair. The orders in these cases were issued on February 8, 2018 and July 12, 2018, respectively. The orders are available at <https://www.cci.gov.in/sites/default/files/07%20%26%2030%20of%202012.pdf> and <https://www.cci.gov.in/sites/default/files/C.%20Nos.%2006%20%26%2046%20of%202014.pdf>, respectively.
- 43 https://www.cci.gov.in/sites/default/files/press_release/Press%20Release-%2007%20%26%2030%20of%202012_0.pdf
- 44 The Economic Times (2019)
- 45 The Economic Times (2018a). India's foreign direct investment laws do not permit multi-brand retailing and the sale of Amazon and Flipkart's own products was a contravention of this law.
- 46 Financial Times (2019)
- 47 The Economic Times (2018b)
- 48 An appeal by AIOVA against the CCI's November 2018 decision was accepted by the National Company Law Appellate Tribunal (NCLAT), with the case scheduled for hearing in July 2019. See <https://www.cnbtv18.com/retail/company-law-tribunal-to-hear-appeal-of-online-vendors-group-against-cci-order-on-flipkart-3372061.htm>
- 49 <https://www.cci.gov.in/sites/default/files/20-of-2018.pdf> (page 10)
- 50 *Ibid* (page 12)
- 51 *Ibid*
- 52 Section 4 of India's Competition Act, 2002, defines dominant position as “a position of strength, enjoyed by an enterprise, in the relevant market, in India, which enables it to—(i) operate independently of competitive forces prevailing in the relevant market; or (ii) affect its competitors or consumers or the relevant market in its favour.” (https://www.cci.gov.in/sites/default/files/cci_pdf/competitionact2012.pdf; page 7)
- 53 <https://www.cci.gov.in/sites/default/files/6%20%26%2074%20of%202015.pdf>

- 54 In Cases No. 6 & 74 of 2015, the CCI ruled as follows concerning the determination of a dominant position, which is first required before examining any possible abuse of dominance: “A complete and correct assessment warrants comprehensive examination of the competitive conditions of the market, taking into account the inherent characteristics of the market, the market structure, nature of competition, competitive strategies adopted by the market participants and all such factors that strengthen or weaken the market position of the enterprise under scrutiny. Thus, the assessment of a case would be unique to its own facts and market under consideration.” (<https://www.cci.gov.in/sites/default/files/6%20%26%2074%20of%202015.pdf>; pages 26-27)
- 55 In the Cases No. 6 & 74 of 2015, the CCI noted the following: “The Commission observes that there are various provisions in the Act that signify the intent of the legislature that there cannot be more than one dominant enterprise in the relevant market at a particular point of time.” (<https://www.cci.gov.in/sites/default/files/6%20%26%2074%20of%202015.pdf>; pages 43-44)
- 56 In its order for Cases No. 6 & 74 of 2015, the CCI opined as follows regarding competition: “competition is not an end in itself; it is a means towards a greater end, which presumes that competition in or for the market inter alia leads to desirable outcomes for the consumers ensuring wide variety of quality products/ services at best possible prices. Towards that end, as long as there is competition in and for the market satisfying these outcomes, regulatory intervention is not warranted to either protect the existing players or to increase the number of players in the market. Competition and competition law is not about counting the number of firms in a particular relevant market to determine whether or not that market is competitive.” (<https://www.cci.gov.in/sites/default/files/6%20%26%2074%20of%202015.pdf>; page 39; emphasis added)
- 57 There is also the argument that violating platform neutrality — that is, not providing a non-discriminatory marketplace — should per se be an anti-competitive act. In this argument, the need to prove dominance is absent. A solution could also be found outside of competition laws where such anti-competitive practices are deemed unlawful, regardless of whether the platform is dominant or not.
- 58 Moore and Tambini (2016)
- 59 It is beyond the scope and limits of this article to provide a detailed roadmap of how the rethinking should appear in practice and analytical specifics. So, we advance only broad arguments and ideas towards a proposal for rethinking dominance in the digital age.
- 60 See Orbach (2013) for an examination of how ‘competition’ had to yield to ‘consumer welfare’ as the primary goal of US antitrust laws.
- 61 “The Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade. It rests on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress, while at the same time providing an environment conducive to the preservation of our democratic political and social institutions” (Stucke 2013: 163).
- 62 The combination of data dominance and massive network effects has allowed digital platforms to morph into what Ezrachi and Stucke (2016: 178, emphasis added) call “super-platforms” that largely dictate the experiences of consumers

and rivals alike: “As the super-platform’s dominance increases, it benefits from its unrivaled ability to control the consumer’s experience. Examples range from Microsoft’s control over a significant proportion of personal computer operating systems, to Google’s and Apple’s control of the smartphones operating super-platform, to Amazon’s control over third-party retailers on its super-platform. The super-platform determines who can join its platform, which apps are featured in its app store, which apps are pre-loaded on the smartphone, and the product’s default settings. Apps can be promoted and demoted. In short, the super-platform becomes the gatekeeper.”

- 63 To be clear, whether it is a break-up or stripping off would depend on the corporate holding structures of these large digital companies.
- 64 As mentioned by Moore and Tambini (2016: 1), “Concerns about corporate size and dominance have never been purely economic. When Senator John Sherman (Republican) introduced his antitrust bill to the US Senate in 1890, he said that too powerful private combinations were equivalent to “a kingly prerogative, inconsistent with our form of government.” “If we will not endure a king as a political power,” Sherman told other Senators, “we should not endure a king over the production, transportation and sale of any of the necessities of life” (cited in US Congress 1890, 2,457).”
- 65 Avila and Kilic (2017)
- 66 Marinescu and Posner (2018)
- 67 Azar, Marinescu, and Steinbaum (2018)
- 68 For Example, Facebook’s acquisition of Instagram (in 2012) and WhatsApp (in 2014) and Google’s purchase of Waze (in 2013) and YouTube (in 2006). Relatedly, since its founding in 2005, Facebook has acquired 65 companies, while Google has been purchasing on average one company a week since 2010, with its most recent acquisitions being firms that develop artificial intelligence systems (Epstein 2018).
- 69 Brazil, India, Kenya, Nigeria, and the U.S. are arguably some of the world’s worst affected democracies from fake news.
- 70 See Schechter (2017).
- 71 Crane (2018)
- 72 Pitofsky (1979: 1051) warned that “excessive concentration of economic power will breed anti-democratic political pressures, and...a desire to enhance individual and business freedom by reducing the range, within which private discretion by a few in the economic sphere controls the welfare of all.”
- 73 See Brandeis (1914) and Wu (2018)
- 74 Pitofsky (1979: 1051)
- 75 *Ibid*
- 76 Corbin (2019)
- 77 Ezrachi and Stucke (2016: 37)

CHAPTER 4

Buyer Power, Competition Law and Platforms

Introduction

In the recent past, there have been rumblings of discontent about our experience in the digital world. Even though the world remains enchanted with the prospects of artificial intelligence to improve our lives, we have also started wondering about the dark side of the digital revolution. Of course, the contradictory nature of the digital revolution has been evident to us from the beginning. The world wide web provided seamlessly (at least for those with speedy connections) access to communication and information which was also used to distribute material of dubious quality. Facebook has had to deal with issues of privacy and the dissemination of fake news. WhatsApp has been used to spread rumors that have led to the lynching of innocent people and there are frequent wars on Twitter. All these developments grab the attention of the public and officials alike.

What is less commented on, but has been gaining steady interest is the notion of buying power.¹ Competition authorities and popular magazines have started getting worried about the effects that platforms such as Amazon and Uber have on the many sellers of goods or services that operate on their platforms. This, in turn, has raised the possibility that platforms may abuse their size to exploit those who participate in them. The previous sentence begs for a large number of clarifications, particularly what we mean by size and abuse.

The concept, borrowed from the economics literature, that seems relevant is a monopsony.² In Economics a monopsony is the equivalent of a monopoly on the buyer side. Just like a monopoly is a single supplier, a monopsony is a single buyer. Monopolies have consumer welfare implications since they are likely to increase prices and reduce output. Similarly, monopsonies tend to reduce the price paid to suppliers and to restrict the amount that is bought.

This chapter has been contributed by Subhashish Gupta, Professor, Indian Institute of Management, Bangalore

At first glance, this does not seem an issue that competition law should be bothered about given its focus on consumer welfare. Lower input or intermediate good prices should result in lower consumer good prices, is the obvious reaction. This, however, is not true, as we shall show later. At any rate, there have been very few antitrust cases that have been brought that relate to cartelisation or abuse of dominance on the buyer side.³

As Naidu, Posner and Weil (2018) note in footnote 10 “A Westlaw search for “product-market” in the Antitrust Cases database yielded 1736 cases since 2000, while a search for “labour market” yielded only 122 cases (as of January 10, 2018). If the word “merger” is added to the search, the numbers fall to 366 and 10. In fact, in none of the ten labor market cases was a merger blocked. The only major case in recent years where the labor market effects of a merger were considered is *United States v. Anthem, Inc.*, 855 F.3d 345 (D.C. Cir. 2017), cert. dismissed, 137 S. Ct. 2250 (2017), where a court of appeals affirmed the district court’s injunction against a merger because of its anti-competitive product market effects, *id.* at 368, but the government also argued that the merger would have anticompetitive labor market effects, as recognised by the dissent, *id.* at 377 (Kavanaugh, J., dissenting).

For another minor example, see Revised Competitive Impact Statement, *United States v. Aetna, Inc.*, 64 Fed. Reg. 44,946 (Aug. 18, 1999) (noting adverse effects of insurance company merger on doctors’ pay), cited in Hemphill & Rose, *supra* note 7, at 2086 n.30. But even in this statement, the argument was just one of many overlapping arguments opposing the acquisition in question and was never addressed by a court because the parties settled.” Similarly, studies on the effect on the benefits and costs of mergers of buyer power have also been meagre.⁴ Recently, there has been a renewal of interest on the antitrust effects of monopsonies and scholars have tried to develop measures that mirror the hypothetical monopoly test that is used in competition law.⁵

Another question to ask is what the above two issues have to do with platforms. Platforms, it can be argued, do not buy or sell but merely connect buyers and sellers and charge an intermediation fee so they cannot by definition have any buyer power or selling power. We would argue that although this might be true of some platforms, it is not always the case.

Nevertheless, it is possible to infer that competition law, in its present form, is powerless against platforms given the paucity of cases against them. Of course, it could be the case that platforms are inherently competitive, so there are fewer competitive problems. On the input side, the situation may be even more unclear. There is no clear legal doctrine or standard tools to evaluate market power even in standard markets, leave alone platforms.

Also, some of the issues raised, such as exploitation of labourers or low wages, have traditionally been dealt with labour laws and employment laws. It could be argued that competition authorities already have their hands full without having to delve into unknown territories.

So, this chapter will likely remain somewhat speculative. However, the issues it raises are very relevant to the Indian situation. There are many small sellers who sell on Amazon and thousands work for Uber. Their welfare should be important to the government and if competition law provides another arrow in the quiver it should not be frowned upon. At this point, we will make some definitions so as to reduce confusion. On a platform such as Uber, there are individuals who wish to avail of car riding services. They will be called “consumers”. These rides are provided by Uber with inputs, the chief among them being drivers. So we will designate Uber as being the “buyer” of drivers. The usage is likely to be controversial since there is no formal employment relationship between Uber and its drivers.⁶

Similarly, for a platform such as Swiggy, individuals who order food will be called consumers, while Swiggy will be a buyer of delivery staff and food from participating restaurants. Clearly, the terminology will not be applicable for matrimonial sites where there are, presumably, no buyers and sellers.

This section will be followed by a short discussion on the analysis of buyer power and its effect on consumer welfare. We will follow up by discussing the interface between competition law and buyer power. After that, we will try to extend the discussion of buyer power to platforms and discuss the efficacy of the concept. We will end with a discussion of the relevance of these concepts to India and provide a conclusion.

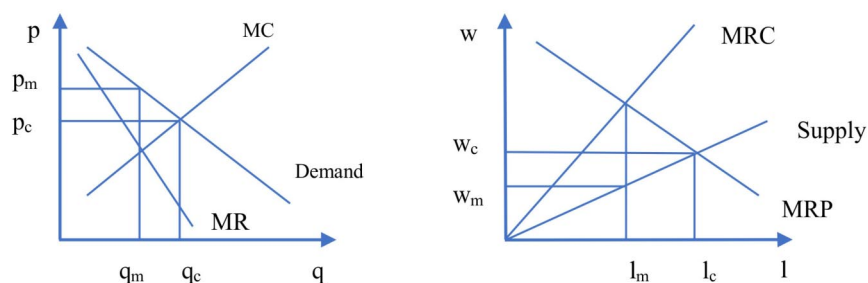
Buyer Power

As described in the introduction, a monopsony represents a single buyer of inputs. A standard example is that of a large factory in a small town, which effectively becomes the sole employer in the town. The analysis can be extended to other inputs, for example, car parts and accessories. A large automobile manufacturer may be the sole buyer of auto parts within a geographical region. Of course, it may be difficult to find a pure monopsony, but one may find firms with various degrees of buyer power. The situation is similar to that with regards to monopoly power. Firms will differ in terms of the substitutes available to consumers for their products, which will determine its ability to charge higher prices without losing too many consumers. In the parlance of Economics, this translates into a low elasticity of demand.

A monopsony, being the sole buyer, faces the whole supply curve, just like a monopolist faces the industry demand curve. To get more inputs it has to offer higher remuneration: not only to the last input hired but to all others. The situation is analogous to that of a monopoly. To sell more a monopoly has to lower prices across all the units it can sell, assuming that it cannot practice perfect price discrimination. To determine the optimal amount of output to sell and the price to charge the monopolist equates the extra revenue it receives from the last unit sold to the extra cost of producing it. Having determined the output, it then uses the demand curve to determine the price it should charge (Figure below).

Similarly, a monopsony has to decide on the remuneration it is going to pay to the inputs it buys and also the amount of the input to buy. If labour is the input at stake the monopsony has to decide on what wages to pay and how many to employ. Here, the monopsony has to balance the extra cost of hiring an extra input, the marginal resource cost, and its extra contribution to the firm's profit. The latter term is called the marginal revenue product and is arrived by multiplying the marginal product, the extra amount an additional unit of input produces, with the extra revenue to be gained by selling an extra unit in the product market. So, it opts for an amount such that the marginal revenue product is equal to the marginal resource cost. After that, it uses the supply curve for the input to find the minimum price at which suppliers of the input are willing to offer that amount and pays that amount.

This is shown in Figure below. If the input market was competitive, so that input suppliers had many buyers to sell to, the firm would not be able to exercise its monopsony power. It would have to pay the market price and buy the amount indicated by the supply curve. So, the input price paid by a monopsony is lower than the competitive price and the amount bought is also lower. This is again similar to that of a monopoly whose product price is higher than the competitive price and the amount sold is lower. A monopoly is an inefficient market structure because there are consumers who would like to buy if the price was lower and the monopolist would like to sell to



them since it could make more than the marginal cost of producing these units, adding to his profit. A similar argument can be made for a monopsony.

Figures show how a monopolist decides on pricing and output and a monopsony determines the wage rate and the level of employment. The firm equates the marginal revenue product with marginal resource cost to determine l_m . It then uses the supply curve to figure out the minimum wage that workers should receive, w_m . Note that the value of the workers' labour is much higher and given by the MRP. So, a monopsony pays less than the value of the workers' labour, compared to a situation where the labour market is competitive, and the wage is w_c and employment is l_c .

The effect of monopsony behaviour on product prices is ambiguous and dependant on the type of competition faced in the product market. If the product market is competitive then the monopsony has no option but to charge the competitive price. However, if the monopsony has some degree of monopoly power then the product price could also be affected. The question is whether prices will be lower or higher if the firm has buyer power. There is no clear answer, but we will present a simple model which will give a clear answer.

Let us suppose a firm faces an inverse demand curve $D(q)$ in the product market, a labour supply curve $S(l)$ in the input market and a production function . We are assuming that there is only one input, labour. Then the firms' profits can be written as

$$\begin{aligned}\pi &= pq - wl \\ &= D(q)q - S(l)l \\ &= D(f(l))f(l) - S(l)l\end{aligned}$$

To maximise profits, the firm would take the first derivative with respect and set it equal to zero.

$$f'(l)D[f(l)] + D' f'(l) - S(l) - lS'(l) = 0$$

In contrast, if the firm faced competition in the input market, at a wage , then its problem would be to set

$$f'(l)D[f(l)] + D' f'(l) - w = 0$$

Comparing the two expressions we can see that, employment would be lower in the case of a monopsony.⁷ This immediately, translates into lower output, since in this simple model we have only one input. A lower output then translates into higher prices in the product market. The analysis would be more complicated if the production function had more inputs, such as capital. Then the question that would arise is whether the market for capital has

some degree of monopsony power or is competitive. Then we would have to consider the substitution possibilities between labour and capital and the effect on employment.

Even though a firm may not be a monopsony it is possible that in some input markets there might be a few large firms, giving rise to an oligopsony.⁸ This would be the analogue of an oligopoly in the product market. Unfortunately, the literature on oligopsony is sparse, contrary to that for oligopoly.⁹ The bulk of the industrial organisation literature is focused on the product market. Blair and Haynes (2012) extend simple models of Bertrand (price) and Cournot (quantity) competition for input markets and also provide a version of the Lerner's index. However, this limited work pales in size to the volume of literature on the product side.¹⁰

Competition Law and Buyer Power

The standard prohibitions against anti-competitive agreements, abuse of dominance and mergers and acquisitions that harm competition can be applied on the input side as well. However, there are very few cases involving the use of competition law to investigate buyer power in input markets. There are several reasons for this.

First, the focus of competition law has been on consumer welfare.¹¹ This was partly due to the effort made to sharpen the focus of competition law through the judicial process in the US. This is because the language of the competition laws in the US, in the Sherman and Clayton Acts, was very broad. However, the Supreme Court in the US has confirmed that antitrust laws apply to both sides of the market.¹²

There is one exception, in that section 6 of the Clayton Act allows workers to form unions, which can be thought of as a form of cartelisation. In the European Union (EU), the focus of competition law on consumer welfare is enshrined in the general guidelines, '[t]he objective of Article [101] is to protect competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of resources.' The importance of consumer welfare as the goal of competition policy seems to be ubiquitous.¹³ As we have seen, with competitive markets, buyer power does not increase product prices and so does not affect consumer welfare. It may have been felt that buyer power could have the effect of suppressing input prices. Lower input prices, one may conclude, wrongly, could only lead to lower product prices. Thus, it was felt, that buyer power could not lower consumer welfare.

The other reason for the lack of interest in buyer power has been that the most important or visible input has been labour. The theme of exploitation

of workers has echoed over the years in ideologies and has led to extensive social policymaking. Worker's rights and their welfare have been safeguarded through minimum wage and employment laws. Using competition law to protect workers has not been considered, in theory, and in practice.¹⁴ In advanced countries decline in unionisation and the whittling down of worker protection might be sufficient reasons for using competition law to protect workers. No such case probably exists in India. Workers in the organised sector probably have enough rights and are protected, though the increased use of contract labour is a cause for concern.

At any rate, our concern is that labour is not the only input. If using competition law in labour markets is unnecessary or complicated, because of the interaction with other laws, or politically difficult, it should not preclude its use for other inputs. It is quite possible that the market for intermediate goods and other inputs are characterised by buyer power and has anticompetitive effects.

As remarked earlier, the lack of interest in buyer power has resulted in the absence of analogous literature to that of the industrial organisation literature on the product side. Of course, the input side does have a significant presence, particularly in the literature on vertical integration. However, models of strategic behaviour on the input side are conspicuous by their absence. For example, there is a large literature on product differentiation but no corresponding work on employer differentiation, except in the management literature in strategy or organisational behaviour. There is a large literature on differences in the quality of labour but that is in labour economics, which brings us to our next point.

Since labour has traditionally been input with the highest visibility and accorded enormous importance, not unduly, since for most of us earn a living by working for wages, the study of input markets has largely been subsumed within the study of labour markets and has been the preserve of labour economics. The kind of impetus that resulted in the industrial organisation literature on the product side has been absent. Instead, the questions that arose were primarily about the welfare of workers and the effect of minimum wage laws which then became an issue of labour economics. The other important input, capital, has been the preserve of financial economists, which again, has not been interested in buyer power.

Consequently, concepts such as the relevant market, the small but significant non-transitory increase in prices (SSNIP test), HHI, concentration ratios and Lerner's index have not been defined for input markets. It is of course theoretically quite simple to extend these concepts, but, the challenge will arise in implementation. Put simply, the concept of relevant market defines

a group of products that are close substitutes and restricted to a geographical area. If we replace products with inputs it seems like a reasonable definition. However, there will be differences between intermediate and primary inputs and other issues such as how far down the supply chain to go looking for input substitution are challenges that will have to be confronted. These should not be more daunting than those already faced on the product side.

Naidu et al (2018) develop concepts like the small but significant and non-transitory decrease in wages (SSNDW), just like the SSNIP test for market definition and similarly downward wage pressure (DWP) to mirror UPP indices. They discuss, how the DWP can be further decomposed into a markdown and the diversion ratio.

Instead of delving further into these concepts, which the interested reader can pursue on her own, we will briefly summarise the few cases that have made it to the courts. Most of these have had to do with specialised labour markets in the US, such as doctors and athletes.¹⁵ In *Kartell versus Blue Shields of Massachusetts*, the allegation was that hospitals had colluded to fix pay scales of doctors and nurses.¹⁶

This inactivity was suddenly disrupted by the revelation that high tech firms such as Apple and Google entered into agreements that precluded firms from hiring each other's employees.¹⁷ This led to a flurry of activity with the Department of Justice and the Federal Trade Commission in the US coming out with antitrust guidelines warning against such behaviour.¹⁸ Other jurisdictions such as Canada have also discussed the issue as has the OECD. More interestingly it was discovered that franchises like McDonald's also practiced non-poaching agreements.¹⁹ The use of such agreements is surprising, particularly among low skilled workers, and it is quite common.

The effect of buyer power on abuse of dominance in the labour market and its effect on encouraging merger activity has not been looked at in terms of case law. The effect of buyer power in reducing prices of other inputs has not featured at all. There is anecdotal evidence that giant stores such as Walmart tend to squeeze their suppliers. However, that has not been investigated for abuse. For one thing, dominance is not a crime but abuse of dominance is and so it is difficult to establish that large firms were abusing their dominance. The other issue is that most people would feel that lower input prices would keep product prices low.

We will now move on to discuss the effect of buyer power in digital markets, especially that of platforms.

Digital Markets and Buyer Power

Commerce is moving to the internet, more so in developed countries. In countries like India, a whole host of firms have cropped up to take advantage of the many problems with the smooth operations of the market. We are aware of firms like Amazon and Flipkart, but there are numerous other firms that sell their wares on the Internet. The business models of these firms are different. Some are pure business to consumer (b2c) businesses using the internet to sell their product while others use different models such as B2B. There is considerable confusion about what constitutes a platform and how it is different from a market or an intermediary.

Spulber (2019) attempts to provide a comprehensive definition of a platform. According to him, a platform is an economic institution that has five basic elements “(a) A platform has a “location” that can be geographic, virtual, or some hybrid. (b) A platform has “sides” consisting of buyers, sellers, and other groups. (c) A platform has “intermediaries” such as market makers, matchmakers, and other firms that manage transactions. (d) A platform has “transaction technologies” that handle purchases and sales, contracting, communication, market making, and matching. (e) A platform has “coordination mechanisms” that provide incentives to participate and handle participation decisions by members of the sides of the market.” One could add to this list that a platform may also provide content and generate and use user-data.

Further, he asserts that the following 10 terms have been used interchangeably to refer to similar structures. These are markets, platforms, intermediaries, market makers and matchmakers, market microstructure, organised exchanges, multisided markets, multisided networks, sharing economy and peer-to-peer (P2P) markets and ecosystems. These refer to different strands of literature spanning economics, strategy and innovation and entrepreneurship. One could add sociology, anthropology and political economy to the list.²⁰

The OECD also lists a number of common economic characteristics for platforms. “These characteristics include positive (in the sense that the networks become more useful as more users join them) direct and indirect network effects, cross-subsidisation, scale without mass potentially global reach, panoramic scope, generation and use of a broad set of user data to optimise their services, disruptive innovation, switching costs, and, in some markets, winner-take-all or winner-take-most tendencies. Although many of these characteristics are not unique to online platforms, their combination can magnify each of them and lead to explosive growth.”²¹

To illustrate the effects of platforms on buyer power we will use the example of Uber. As noted above a major source monopoly power lies in network

effects and switching costs on the input side.²² Successful aggregators have large pools of drivers, so they can provide better coverage and lower prices than competitors. Drivers would tend to join a larger network because it can provide more consistent employment. Consequently, new entrants would find it harder to enter the taxi cab aggregator market.

The network effect is compounded by lock-in. Drivers have to invest in their cars and have to keep making the monthly installment payments, resulting in a certain degree of lock-in into the aggregator. Of course, they could operate as private drivers, but income streams would become more uncertain. The possibility of switching between aggregators is difficult to judge given the lack of information in India. Some cabs bear the logo and are painted with the aggregator's name. They also have specialised software, making switching aggregators difficult.²³

The same two effects mentioned above are likely to result in buyer power as well. Added to that, drivers are typically poor and are unlikely to move to other occupations or locations to look for alternative work. Consumers, on the other hand, should have more choices. There should be more substitutes like owner-driven cars and public transport for them, partially mitigating the monopoly power on the product side. However, the combined effect will be lower remuneration for drivers and higher prices for consumers.

This is not to suggest that all platform models will suffer from this problem. Each product and market are unique, both from the product side and from the input(s) side. However, the presence of network effects tends to reward size, resulting in dominance on the product side. This can then be transferred to the buyer side. The reverse can also happen.

Buyer Power and India

The preamble to the Competition Act 2002 reads, “An Act to provide, *keeping in view of the economic development of the country*,²⁴ for the establishment of a Commission to prevent practices having an adverse effect on competition.....” It is difficult to judge to what extent competition law has had any discernible effect on the citizens of India. The Competition Commission of India is in the news occasionally but the effect of its actions in terms of enhancing consumer welfare is unknown. We are not aware of any study that attempts to measure the impact of competition law on the welfare of the citizens of India.

There are a number of well-known platform businesses in India. Amazon and Flipkart are probably the best known. They would be closely followed by Uber and Ola, the taxi cab aggregators. Big Basket is known for groceries, Swiggy for food delivery, Urban Ladder and Pepperfry for furniture and MakeMyTrip and Yatra for travel and accommodation. PayTM operates in

the online payments business. At present, the market seems quite crowded with almost all sectors having at least two competitors. For instance, Food Panda also operates in the food delivery market and Zomato which started life as an information provider for restaurants has entered into the food delivery market as has Uber. Besides PayTM, Airtel has its own payments system as do Uber and Ola.

As the above example show, there are a large variety of business models used in platforms in India. As an example consider the grocery business. Namdhari's in Bangalore is a grocery that deals with organic produce and other kitchen staples. The company has a large number of brick and mortar stores which it complements with an online presence, which is of relatively recent origin. Probably, it felt competitive pressures from its competitors, though, Bangalore's bad traffic could have been a factor. Big Basket and Towness only have an online presence, with the latter specialising in vegetarian and regional produce. Big Basket covers a whole range of products including meat and fish. Others like Licious operate in niche markets, like meat and fish products in this case. Fresh to Home started off in a similar way but has since expanded to supplying vegetables as well. Grofers, on the other hand, is a food delivery service somewhat like Swiggy. The size of the online market in groceries is probably small but could in future years become bigger. At that time issues of buyer, power could appear. At that time there may be problems with market definition as discussed by Mandrescu (2018).

Some of the online sellers are platforms, which sometimes rely on multi-related sided markets. Some of them claim that they are pure market places. They are in the business of matching and they are neither buyers nor sellers. An example could be Swiggy, which is in the business of delivering food. It has an app by which consumers can order food from restaurants, which is then delivered by its fleet of delivery staff. It could claim that it is a platform that connects consumers with delivery agents and restaurants and that it has no responsibility for the quality of food or the delivery service. However, it does have a dedicated call centre and if there is a problem it looks into it.

In contrast, Uber in India is a taxi cab aggregator. Again, using its app consumers can book rides, which then services using its pool of drivers. Uber claims it is a pure platform that connects riders to drivers. There is no dedicated call centre or email address. The only method of complaining is to raise issues on its website. Issues of misbehaviour by drivers are shrugged off by saying that Uber is a platform and that it bears no responsibility for the behaviour of drivers or passengers. Ola, another taxi service, using a similar business model is more responsive but shares the same philosophy as Uber. In contrast, Meru is more like a traditional taxi company, providing rides for passengers.

Thus, there are many types of platforms, even within the same product. Some of them claim to be pure platforms, that offer matching services for a fee. That claim would probably be true for matchmaking sites like Shaadi.com. However, for taxi cab aggregators that claim does not hold. When a passenger wants a ride, they don't get to see which drivers are interested in offering a ride and then negotiate a price with them to finally choose one driver. Instead, the aggregator offers a price and quality of vehicle combination. This is a take it or leave it offer. On the driver side possibly, a similar deal is offered. If some driver agrees, then a transaction takes place. The difference between the selling price of the ride and the buying price for the driver is unknown. If the aggregator has monopoly power, then it can charge high prices.²⁵

A different cause for concern is the nature of employment relationship or lack of it for Uber drivers. If Uber is a pure marketplace then drivers are "independent business units". In that case, they would not be covered by the usual workplace laws and norms that businesses have to follow for regular employees.²⁶

A different area that may suffer from the problems of monopsony is agricultural markets. There are many reasons for the farmers' plights, but, one story that has been repeated many times is that of groups of middlemen who connive to deprive farmers of a decent price for their products. This seems a textbook case of cartelisation in an oligopsony. It is sometimes said that the Indian competition act is largely based on EU law and as such it addresses developed countries' concerns. We don't know how the phrase, *keeping in view of the economic development of the country*, got into the competition act, but maybe we could think of concentrating more on the input side of markets.

As far as digital markets are concerned there is cause for concern there as well, even though, such markets are small in size, currently. Among a certain part of the population, mostly urban, tech-savvy and time-constrained, but not necessarily rich, the buying experience is significantly restricted to digital markets. If we need food we turn to Swiggy or Zomato, for groceries to Big Basket, to HouseJoy for plumbing services, Urban Ladder for furniture and Urban Clap for beauty services. To serve these needs a whole host of people have moved into these occupations, often from semi-rural areas. It would be sad if these people found themselves effectively working as employees but without the job security or benefits that come with employment.

As this sector grows and becomes dominated by platforms, more and more workers and providers of intermediate inputs would find themselves similarly squeezed. Amazon and Flipkart could use their buying power to squeeze small businesses and medical services providers such as Practo could do the same for doctors and nurses.

It could be argued that labour and employment laws could help workers and for the farming sector, the government provides for minimum support prices. Also, CCI may not have the expertise to do competition assessment in these markets and getting entangled with different laws and political issues may be foolhardy. However, if the trend of expansion of digital markets continues it might find its hands forced.

Conclusion

This chapter looked at a number of issues that have been prominent at one time or another but that have faded away, only to regain importance due to the emergence of the digital economy. The issue of monopsony and antitrust law briefly gained prominence in the 1990s (Blair and Harrison (1991), Blair and Harrison (1992), Murphy (1996), Blair and Romano (1997). Separately, monopsony or monopsony power in labour markets has been a subject of study since the year 2000 (Bhaskar, Manning and To (2002). A lot of work was involved around trying to figure out whether minimum wage laws lowered employment, as standard competitive models of labour markets would suggest.²⁷

The evidence seemed to suggest that it did not and one possible conclusion that could be drawn is that labour markets are not competitive. Various authors estimated supply elasticities for labour which were quite low, which did not suggest competition. The issue of buyer power also received some attention around that time given the growing clout of superstores like Walmart (Noll 2005) and there are a number of studies on oligopsony power in national and international markets (Marrouch and Turk-Ariss (2012). The lack of growth in wages in the US in the recent past, despite fairly high levels of growth in the economy and record-high profits, prompted another attempt to look for explanations. One was found in labour market distortions, viz., monopsony (Hovenkamp (2018), Krueger and Posner (2018).

A contemporary development has been the pre-eminence of large digital giants in the economy. Some of these firms operate as platforms. Competition authorities around the world have been troubled by some of their activities, that might constitute abuse of dominance and they have been investigated and fined. The focus has been on the product side but complaints of anticompetitive agreements on the “buying side” have also surfaced. This dragged buyer power in input markets and in particular labour markets back in the limelight. However, abuse of dominance issues such as market foreclosure or margin squeezing has not been studied in buyer markets. Our aim will be to partially fill this gap in the future.

References

1. Anderson, Trude B., Asche, Frank, and Roll, Kristin Helen, (2008), Oligopoly and Oligopsony Power in concentrated Supply Chains, ISAC Working Paper.
2. Bhaskar, V., Manning, Alan and To, Ted, (2002), Oligopsony and Monopsonistic Competition in Labour Markets, *Journal of Economic Perspectives*—Volume 16, Number 2—Spring 2002—Pages 155–174.
3. Blair, Roger D. and Harrison, Jeffrey L., (1991), Antitrust Policy and Monopsony, *Cornell Law Review*, Volume 76, Issue 2.
4. Blair, Roger D. and Harrison, Jeffrey L., (1992), The Measurement of Monopsony Power, 37, *Antitrust Bulletin* 133.
5. Blair, Roger D. and Lopatka, John E., (2008), Predatory Buying and Antitrust Laws, *Utah Law Review* 415.
6. Blair, Roger D. and Romano, Richard E., (1997) Collusive Monopsony in Theory and Practice: The NCAA, (42) *The Antitrust Bulletin* 681.
7. Devitt, Conor & Tol, Richard, 2012. “Oligopoly and Oligopsony Power in the Swedish Market,” Working Paper Series 3212, Department of Economics, University of Sussex Business School.
8. Dowd, James Murphy, (1996), Oligopsony Power: Antitrust Injury and Collusive Buyer Practices in Input Markets, 76 *B.U. L. Rev.* 1075
9. Hannaford, Steve (2005), Both Sides Now, *Harvard Business Review*. <https://hbr.org/2005/03/both-sides-now>
10. Hovenkamp, Herbert J., (2018) Whatever Did Happen to the Antitrust Movement? Faculty Scholarship at Penn Law. https://scholarship.law.upenn.edu/faculty_scholarship/1964
11. Krueger, Alan B., and Posner, Eric A., (2018), A Proposal for Protecting LowIncome Workers from Monopsony and Collusion, The Hamilton Project
12. Mandrescu, Daniel (2018), Applying (EU) competition law to online platforms: Reflections on the definition of the relevant market
13. Marinescu, Ioana and Hovenkamp, Herbert J., (2018), Anticompetitive Mergers in Labor Markets, Faculty Scholarship. http://scholarship.law.upenn.edu/faculty_scholarship/1965
14. Mathis, Jerome and Sand Zantman (2015), Welfare Standards in Competition Policy, Institute of Industrial Economics, Working Paper.

15. Marrouch, Walid and Turk-Ariss, Rima, (2012), Bank pricing under oligopsony- oligopoly: Evidence from 103 developing countries.
16. McIntyre, David (2019), Beyond a 'Winner-Takes-All' Strategy for Platforms, MIT Sloan Management Review, <https://sloanreview.mit.edu/article/beyond-a-winner-takes-all-strategy-for-platforms/>
17. Monopsony in Law and Economics, Blair, Roger D. and Harrison, Jeffrey L., Cambridge University Press 2010, Cambridge.
18. Naidu, Suresh, Posner Eric A and Weyl, Glen E, (2018), Antitrust Remedies for Labor Market Power
19. Noll, Roger G., (2005), Buyer power and Economic Policy, SIPER Discussion Paper No. 04-08.
20. OECD (2019), *An Introduction to Online Platforms and Their Role in the Digital Transformation*, OECD Publishing, Paris, <https://doi.org/10.1787/53e5f593-en>.
21. Piyapromdee, Suphanit,. Hillberry, Russell, and MacLaren, Donald,. (2007), Fair Trade Coffee and the Mitigation of Local Oligopoly Power. http://www1.econ.hit-u.ac.jp/trade/apts/2008/Papers_2008/Suphanit%20Piyapromdee.pdf
22. Rogers, Richard T. and Sexton, Richard J., (1994) Assessing the Importance of Oligopsony Power in Agricultural Markets, American Journal of Agricultural Economics, Vol. 76, No. 5, Proceedings Issue pp. 1143-1150
23. Shibata, Saori (2019), Gig Work and the Discourse of Autonomy: Fictitious Freedom in Japan's digital Economy, New Political Economy.
24. Steinbaum, Marshall (June 2019), Antitrust, the Gig Economy, and Labor Market Power, forthcoming in Law and Contemporary Problems
25. Svend Albaek, (2013), Consumer Welfare in EU Competition Policy, http://ec.europa.eu/dgs/competition/economist/consumer_welfare_2013_en.pdf
26. The benefit of competition policy for consumers, Note by the UNCTAD secretariat, April 2014.

Endnotes

- 1 Economists think antitrust policy should pay more attention to workers. The Economist, Oct 27, 2108
Amazon's Monopsony is not OK, The New York Times, Oct 19, 2014
What's Monopsony? It may be the reason you haven't had a raise. Bloomberg Businessweek, 15th Oct, 2018.
Hannaford (2005)
- 2 Labor Markets, Chapter 16, Microeconomic Theory: Basic Principles and Extensions by Walter Nicholson and Christopher Snyder, CENGAGE 2017, Delhi and Blair and Harrison (1997).
- 3 Naidu, Suresh, Posner Eric A and Weyl, Glen E, (2018), Antitrust Remedies for Labor Market Power
- 4 Marinescu and Hovenkamp (2018)
- 5 Naidu, Suresh, Posner Eric A and Weyl, Glen E, (2018), Antitrust Remedies for Labor Market Power, p27
- 6 This is an interesting legal issue. See Steinbaum (2019).
- 7 The first two terms in both the equations represents the Marginal Revenue Product (MRP), whereas the remaining part represents the marginal resource cost (MRC). Both firms set $MRP = MRC$ to decide on employment levels and wages, and consequently, final output and prices. The MRC for the monopsonist will always be higher than the corresponding wage rate and will result in a lower level of employment.
- 8 Murphy (1996) and Bhaskar, Manning and To (2002).
- 9 There is some empirical work on the effects of oligopsony, particularly in agricultural markets. See Rogers and Sexton (1994). Also see Piyapromdee, Hillberry and Maclaren (2007), Marrouch and Turk-Ariss (2012), Anderson, Asche and Roll (2008), Devitt and Richard (2012).
- 10 There is no comparative volume on the input side to The Theory of Industrial Organisation by Jean Tirole.
- 11 Albaek (2013) and Mathis and Zantman (2015)
- 12 Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co., 549 U.S. 312 (2007)
- 13 Please see Albaek (2013) and UNCTAD (2014)
- 14 See Steinbaum (2019)
- 15 See Blair and Romano (1997)
- 16 United States Court of Appeals, First Circuit, Nov 28, 1984 749, F.2d 922
- 17 Garrison vs. Oracle Corp., 159 F. Supp.3d 1044 (N.D. Cal. 3016).
- 18 U.S. Department of Justice & Federal Trade Commission, Antitrust Guidance for Human Resource Professionals (2016).

- 19 Firms often ask employees to sign contracts specifying that they will not quit and join a rival, taking some of the knowledge about processes and other valuable information with them. A different approach is for rival firms to agree to conpoaching agreements. *United States vs. eBay, Inc.*, 968 F. Supp. 2d 1030 (N. D. Cal. 2013)
- 20 See Shibata (2019)
- 21 OECD (2019)
- 22 The same is true on the product side. Some scholars point to the eclipse of MySpace by Facebook even though it had a head start. Clearly superiors business strategies have a role to play (McIntyre 2019).
- 23 Currently drivers can practice multi-homing, working for both Uber and Ola. However, Steinbaum (2019) refers to a “program nicknamed Hell”, that inhibited multi-homing.
- 24 Italics inserted by author
- 25 In fact, since aggregators have large amounts of information, they can probably estimate demand for each ride for a customer and capture the entire consumer surplus. See Cohen (2016).
- 26 See opinion of advocate general Szpunar delivered on 11 May 2017 Case C-434/15 *Asociación Profesional Elite Taxi v Uber Systems Spain SL*
- 27 Naidu, Posner and Weil (2018)

CHAPTER 5

Personal Data and Consumer Welfare in the Digital Economy

Introduction

In economic theory, the term “consumer welfare” is commonly construed as the “surplus” gained by consumers from the consumption of particular goods or services. It is the difference between what they were willing to pay for something and what they ended up paying for it. One of its most notable applications is in the field of competition law and policy, with many arguing that enhancing consumer welfare is, in fact, the core function of competition law. The popularity of this view comes from the links that have been drawn, by scholars, courts, and lawmakers, between economic efficiency and consumer welfare, with consumer surplus being seen as the most convenient tool to measure those outcomes.

While this still remains the dominant discourse, efficiency, consumer welfare, and consumer surplus triad has also received its fair share of criticisms. Firstly, it has been argued that consumer surplus is not a fair or adequate indicator of efficiency and welfare, which may be better represented by the overall social surplus. Secondly, there are those who contest the very foundations of whether economic efficiency or consumer welfare should be seen as the ultimate goal of competition law. Some in this group have suggested that other non-economic factors, such as implications on the privacy of individuals, should also be factored into competition assessments.

While much of the debate around consumer welfare comes from the field of competition law, this concept also holds broader significance in other legal and policy contexts. This is particularly true for the range of issues that fall under the rubric of “customer protection” related laws. In these situations, the relatively narrow economic construct of consumer surplus gives way to overarching goals like “*protecting consumer interests*” and ensuring “*consumer well-being*”, which find expression under general consumer protection as well as sector-specific laws.

This chapter has been contributed by Smriti Parsheera and Sarang Moharir, researchers at National Institute of Public Finance and Policy, New Delhi

In the context of the data-driven digital economy, consumer interests are closely linked with potential use or abuse of users' personal data. Advances in the volume and granularity of user data have allowed firms to understand user behaviour and needs in ways that were previously unknown. It has also led to the proliferation of advertising-supported business models allowing consumers to receive various “free” services. Yet, these developments are accompanied by concerns that unknown to her, the consumer herself has “become the product”. This has led to heightened concerns about the risks and harms arising from the unchecked use, or *misuse*, of personal data. These concerns are compounded by the increasing concentration of data in the hands of a few large players and its long term effects on competition and consumer interests. These developments have led to a need for fresh policy thinking on issues relating to the protection of personal data and regulation of data monopolies.

In July 2018, an expert committee constituted by the Government of India under the leadership of Justice B. N. Srikrishna submitted a Draft Protection of Personal Data Bill to the Government. The mandate given to the committee was to suggest a framework that would “*unlock the data economy while keeping data of citizens secure and protected*”. The term “consumer welfare” appears only once in the Committee’s report. This is in the context of the right to data portability where the Committee notes that control over one’s data would enable competition with a potential increase in consumer welfare (Srikrishna Committee, 2018).

Needless to say, the concept of privacy has deep moral, philosophical and legal underpinnings, an exploration of which goes beyond the scope of this paper. Our focus here is on discussing the importance of consumer welfare in the digital economy, spanning across the fields of competition, consumer protection and data protection laws. We discuss the interactions between these fields as well as the complementarity and differences in their approaches. Although the ultimate goal in each case is to secure better outcomes for consumers, there are significant differences in the design and scope of the interventions under each framework.

Continuing with a silo-based approach is, therefore, not going to be sufficient to ensure the overall welfare of consumers in the digital economy. What we need, instead, is to have appropriate legal and institutional mechanisms to facilitate interactions across these fields and empower the respective agencies to account for a range of economic and non-economic factors that shape the well-being of consumers.

The Economics of Consumer Welfare and Data Privacy

Economic theory tells us that, in a well-functioning market, the self-motivated behaviour of economic actors should lead to efficient patterns of production and consumption. Efficiency here implies that it would be not possible to make some person better off without making another person worse off (Weimer & Vining, 2011).

This concept of “efficiency” can have several dimensions. For instance, *allocative efficiency* aims to ensure that there is an effective allocation of resources in the economy; *productive efficiency* requires that the costs of production should be kept at a minimum; while *dynamic efficiency* seeks to promote innovative practices. Much of competition enforcement has, therefore, been focused on promoting economic efficiency using competition as a tool for making markets more responsive to consumer preferences (Competition Commission of India v. Steel Authority of India Limited, 2010).

In the words of the Indian Supreme Court, “*the ultimate goal of competition policy (or for that matter, even the consumer policies) is to enhance consumer well-being*”.¹ This emphasis on consumer welfare or well-being has also been seen in the Competition Commission of India (CCI)’s jurisprudence. For instance, in a set of cases relating to the interest rates and pre-payment penalties charged by different banks, the CCI expressed the view that the importance of ensuring free competition between existing or potential competitors lies in the fact that competition results in allocative and productive efficiencies, which result in consumer welfare.²

The link between competition law, efficiency, and consumer welfare have, however, not remained uncontested. The US, in particular, has been at the centre of a fierce debate on this subject. Influenced by the proponents of the Chicago School, the well-accepted position among courts in the US has been that the only or main goal of antitrust laws is to enhance consumer welfare. However, there is now a growing body of scholars that disagrees with the use of consumer welfare as the gold standard for the implementation of competition policy as well as the use of “consumer surplus” as the optimum measure of consumer welfare (Orbach, 2011; Khan, 2016; Wu, 2018).

In this context, it is often suggested that instead of focusing only on consumer surplus, enhancing the overall social surplus should be the test of economic efficiency. This would require taking account of the net benefits to consumers *as well as* producers (Weimer & Vining, 2011). Another set of criticisms focuses on the inability of the consumer welfare standard, at least in its current form, to check against the “suppression of competition” or enable the preservation of various “non-economic values” (Wu, 2018).

These non-economic values could include not only the goal of enhancing privacy and data protection but also other factors like protection of employees, environment and culture (Grunes & Stucke, 2016; Maziarz, 2014). Further, Khan (2016) notes that the narrow focus on metrics like price and output for gauging welfare is particularly unsuited for the digital economy. She argues that the focus should, instead, be on protecting a wider range of interests, by preserving competitive processes and ensuring openness in the market structure.

While the broader academic debate on the adoption of economic versus non-economic goals is far from settled, competition regimes globally do reflect goals that go beyond the consumer welfare standard. As per a survey of fifty-seven competition authorities by the International Competition Network, only seven of them agreed with the provided definition of consumer welfare – consumer welfare as it relates only to consumer surplus and excludes non-economic considerations (Waked, 2014).

Despite the observations made by courts and the competition authority in India, this is also the position under Indian law. The Competition Act, 2002 provides that one of the main duties of the CCI is to protect the interests of consumers. However, it places this goal at par with other objectives like eliminating anti-competitive practices, promoting competition, and ensuring freedom of trade among market participants. The pursuit of other non-economic goals, like ensuring the informational privacy of consumers, is, however, not yet reflected in Indian competition law or practice.

Market Failure-based Justifications

At the heart of the preceding discussion about the key goals of competition policy lies the assumption that the market economy will function best under competitive conditions. That is, the competition will be able to ensure that users gravitate towards firms that offer them more innovative products and services at better prices and on more favourable terms. However, in reality, the relationship between firms and consumers is characterised by deep asymmetries of information and power. Much of the focus of policy interventions, under consumer protection and sectoral laws, is, therefore, directed towards addressing information asymmetry, market power and other market failures. This may be through mandatory disclosures, the prohibition of unfair practices and opportunities for consumer redress.

Consumer protection and sector-specific laws generally use phrases like “*protection of consumer interest*”, “*consumer well-being*” and “*preventing harm to consumers*”, instead of the economic concepts of consumer welfare and consumer surplus. Cseres (2007) elaborates on the difference between the use of the consumer welfare standard in competition and consumer protection laws – while its role in the former context is to establish a standard of proof for

investigating perceived anti-competitive activities, welfare goals under consumer laws are directed more towards correcting market failures and offering consumers a more advantageous position in market transactions. Consumer welfare in this sense “*is concerned with efficient transactions and cost-savings but it is also directed at social aspects of the market such as the safety and health of consumers.*” (Cseres, 2007).

To say that one type of intervention is designed to assess market failures while the other is not, would however not be accurate. Addressing market power, a key type of market failure, in fact, lies at the heart of competition interventions. While competition and consumer laws may focus on different types of market failures and offer different remedies, but both are aimed at creating well-functioning and competitive markets that promote consumer welfare (Planning Commission, 2007).

The difference being that while competition law often focuses on the structural aspects of the market, consumer protection usually applies at the level of consumer transactions. However, as we note in the subsequent discussions, it is not easy to draw clear demarcations between where the territory of one framework ends and the other begins. This leads to situations where addressing a particular market failure may involve, and even require, multiple levels of interventions: the issues of data protection in the digital economy being a useful case in point.

Rationale for Intervention in the Digital Economy

Several jurisdictions, including India, have recognised privacy to be a fundamental human right, with informational privacy being an important facet of this right. In this context, Kerber (2016) notes that the economic welfare approach or the market failures based justifications, in themselves, “*might not always grasp sufficiently the normative dimension of privacy as a fundamental right*”. The motivation for regulatory interventions to secure the informational privacy of individuals, therefore, has to go well beyond the realm of economic justifications.

In August 2016, when the Supreme Court of India upheld the existence of a fundamental right to privacy, it recognised that the right has a positive as well as a negative element.³ The negative element constrains the State from indulging in violation of an individual’s privacy, except in accordance with a fair and reasonable process established by law. The positive element, on the other hand, requires the State to put in place a legal framework that would restrict others from violating the privacy rights of individuals. The current process towards the formulation of a data protection law in India, a draft of which was prepared by the Justice Srikrishna Committee, forms

part of this move towards realisation of the positive elements of the right to privacy.

Ultimately, the appropriate regulatory response on data protection has to be grounded in the normative principles that support the need for informational privacy, but also the economic and behavioural realities of the digital economy. It is a well-known fact that the business models of large technology companies like Google, Facebook and Amazon as well as numerous startups operating in the digital space hinges on the economic value that can be derived from the collection and processing of large volumes of personal data. This makes it logical to expect that users' data, particularly of the kind that can be used to understand their behaviour and preferences, is among the key sources of competitive advantage in the digital economy. Aided by big data sets and machine learning algorithms, the volume and granularity of data held by a firm can determine the success of its present and future business models and the ability of newer players to compete in those spaces.

Firms tend to use personal data for a variety of purposes. This includes its use to customise goods and services, discriminate effectively between people with ranging willingness to pay, and efficiently sort people with different characteristics (Hui & Png, 2005). In all these different uses, personal data can essentially serve as a means to efficiently capture consumer preferences, which could, in turn, contribute to an increase in consumer welfare. Yet, the rampant collection, distribution and misuse of this personal information can also be detrimental to consumer interests in many ways.

First, profiling of individuals using personal information may lead to ex-post inefficiencies. Potential, as well as existing consumers, may be priced out of the market when more information is available to the seller due to aggregation of data to create consumer profiles. Second, firms may collect personal information in one market and use it to further their business interests in some other markets, either from the direct use or sale of that data. This type of market structure may incentivise firms to collect excessive personal information, at the expense of their own consumers (Taylor, 2004). Personal information may also be used to direct unsolicited promotions and marketing, imposing a direct cost of intrusion on recipients (Hui & Png, 2005).

Moreover, there are a number of factors due to which market competition may not be effective in curbing these privacy concerns in the digital economy (Grunes & Stucke, 2016). Firstly, consumers may not be adequately aware of the intrusive tactics used by technology firms to increase profitability while compromising on the user's welfare (Stucke & Ezrachi, 2017). Even in cases where consumers acknowledge their privacy concerns and are aware that certain business models may violate those conditions, this is often not reflected in actual consumer behaviour. Given these knowledge and behavioural

barriers, it becomes hard to expect that competitive forces would enable a significant proportion of consumers to shift from one provider to the other merely because it offers better protection for their personal data.

There could also be a potential trade-off between an individual and collective rights in certain contexts. For instance, an individual's decisions about the information that she chooses to share on social media affect not just her own rights and entitlements but also those of others who are associated with that post. Eventually, a series of such individual actions can go on to shape the collective standards of privacy in society. This creates some tension between what may be regarded as generally desired standards of privacy and an individual's decisions about the use of her personal data. As noted by the Justice Srikrishna Committee, "*protecting the autonomy of an individual is critical not simply for her own sake but because such autonomy is constitutive of the common good of a free and fair digital economy*".

The next challenge comes from the fact that the online economy is characterised by the existence of significant network effects, both direct and indirect, which makes it a "winner takes all" or at least a "winner takes most" market (Economides, 2004). In order to gain the advantage of these network effects, service providers, and the investors who back them, are known to indulge in sustained practices of deep discounting and cashback offers, which again make it harder for newer players to break into the market (Parsheera, Shah & Bose, 2017).

Concerns about the anti-competitive impact of deep discounting practices directed towards gaining network effects have also been brought to the attention of CCI in the context of online taxi aggregation services and e-commerce marketplaces.⁴ However, the CCI found that there was no *prima facie* case of dominance in either of these markets as a result of which the issue did not find its way to a full-fledged investigation.

Finally, there are several complex tradeoffs in measuring consumer benefits and harms in the digital economy, which may not be adequately accounted for in the traditional, economic factors driven, reading of consumer welfare. As per the Committee for the Study of Digital Platforms (Stigler Center, 2019), these difficulties in the assessment of welfare standards in digital markets arise from the challenges in measuring volume, quality, and consumer surplus. For instance, the prevalence of behavioural effects in digital economies has led businesses to draw from social science and neuroscience to incorporate persuasive techniques that "feed human rewards centres" (Stigler Center, 2019). As in the case of personal data violations, the harms caused by such practices and the benefits gained by consumers from the utilisation of the underlying service, which is often provided without any charge, are not easy to measure.

Laws Relating to Consumer Welfare

Having discussed the rationale behind the need for interventions aimed at securing the well-being of consumers in the digital economy, we turn next to examine how this concept has been translated into the law. Do we begin this process by examining who is the “consumer” whose interests are sought to be protected under various laws? That is followed by a brief overview of the kinds of protections being afforded to consumers under each law.

Identifying the Protected “Consumer”

The recently enacted Consumer Protection Act (CP Act), 2019, which replaces the earlier CP Act of 1986, is now the country’s primary law for the protection of consumer interests. It was brought about to account for the rapid transformations in consumer markets, including in the e-commerce sector. One of the ways in which it does so is by explicitly stating that the law applies both to offline transactions as well as online ones that are carried out through electronic means.

The CP Act defines a consumer to mean any person who buys, avails, hires or uses any goods or services, for a consideration. The definition, however, specifically excludes persons who obtain goods or services for a “commercial purpose”.⁵ In doing so, it limits the application of the law to end users and excludes any intermediate users. In contrast to the CP Act, the definition of consumer under the Competition Act, 2002 covers all persons who buy or avail any goods or services for consideration or are the users or beneficiaries of the same, whether it is for a commercial purpose or for personal use.⁶

This is clarified further in the recent recommendations of the Competition Law Review Committee (CLRC), which was set up by the government to review the competition law framework in India. As per the committee, the definition of the consumer can be further clarified to include both “direct and indirect” users of goods and services.⁷

The competition law framework, therefore, applies to both intermediate as well as end-users. However, the definition is not always easy to apply in practice, especially in the context of multi-sided markets, where one side of the market ends up receiving the services “free of cost”. This issue came up in the case heard by the CCI against Google’s anti-competitive practices in the general search and search advertising markets. Google argued that as the search service is available for free, the company did not have any trading relationship with the users, which was a pre-condition for defining a relevant market and a finding of dominance in that market.⁸

The CCI, however, rightly went on to reject this argument by highlighting the two-sided nature of the market and the role that end-users play in the market by providing their “eyeballs”, which are, in turn, monetised through advertising revenues (Parsheera, 2018a). This interpretation also finds support in the report of the CLRC, which notes that the definition of the term “price” under the Competition Act is sufficiently broad to also include non-monetary considerations, such as consideration paid in the form of data.⁹

Lipsky et. al, (2019) highlight a related issue of interdependencies and complex incentive mechanisms in digital platforms. This can be illustrated by the manner in which platform-based markets tend to serve customers on both sides of the market, namely, the providers of the service as well as end consumers. Examples of this include ride-sharing providers like Uber and Ola, online marketplaces like Amazon and Flipkart and room aggregators like Airbnb and Oyo. It may sometimes happen that users on one side of the market may benefit from a particular action or design feature while those on the other side may be harmed by it. The divergent interests of these two groups of customers, therefore, raise questions about whose interests are to be prioritised while pursuing consumer welfare, whether in the context of competition or consumer protection laws?

Consumer Protection in Various Legal Contexts

The importance of pursuing the best interests of consumers is highlighted at several places in the competition law framework. First, as noted previously, protecting the interests of consumers is listed as one of the main duties of the CCI. Second, the delineation of the relevant market, which forms the basis for assessment of abuse of dominance by a firm in that market, depends on which goods or services are regarded as substitutable by consumers.¹⁰

Third, the law requires that the “*accrual of benefits to consumers*” needs to be taken into account while assessing the anti-competitive effects of any vertical or horizontal agreement.¹¹ Finally, the definition of dominance looks at whether the firm has the ability to “*affect its competitors or consumers or the relevant market in its favour*”, making the dependence of consumers on the firm a relevant factor for determining its dominant position.¹²

However, the CCI has noted that when it comes to *abuse* of dominance, any activity that falls within the scope of types of abusive conduct identified under the law would necessarily lead to consumer harm and, therefore, the same does not need to be separately established.¹³ The CLRC report also contains some pertinent observations in this regard. The committee noted that “consumer harm” should be specifically included as one of the factors to be taken into account for assessing whether a practice may have an appreciable adverse effect on competition.¹⁴

On the issue of taking into account factors like “network effects” and “control over data” as relevant factors for assessing a firm’s dominant position, the committee acknowledged that the competition law already offers sufficient flexibility to the CCI to take into account these factors.¹⁵

While the above discussions illustrate how the goal of protecting consumer interests finds a place in several laws, it is interesting to note that the phrase “consumer welfare” is rarely ever used in the law. One of the few places where it finds a statutory mention is in the CP Act 2019, which creates a new body called the Central Consumer Protection Authority. One of its functions is to “*advise the Ministries and Departments of the Central and State Governments on consumer welfare measures.*”¹⁶ Another reference to this phrase comes up in relation to the creation of a consumer welfare fund under the Central Excise and Salt Act, 1944.¹⁷

Rules made under the excise law define the “welfare of consumers” to include the “promotion and protection of rights of consumers”. The rules under the CP Act, 1986, also provided that, in cases where the consumers entitled to receive compensation under the law could not be conveniently identified, the fines should be directed towards this fund.¹⁸ Similar funds for the education and protection of specific groups of consumers have also been created under various sectoral laws.¹⁹

When it comes to the protection of personal data, the focus of the law shifts from establishing a provider–consumer relationship to figuring whether the entity is involved in handling or processing any personally identifiable information. This would explain why the term “consumer” does not find any mention in the current data protection-related provisions under the Information Technology Act, 2000 (“IT Act”) or the recently tabled Protection of Personal Data Bill (“PDP Bill”), the previous version of which was drafted by the Justice Srikrishna Committee. Law on data protection is in that sense wider in scope compared to competition or consumer protection laws as the rights and protections afforded by them apply irrespective of the nature of the relationship between the individual and the data handler.

Personal Data, Competition and Consumer Protection

The previous sections illustrated how enhancing consumer welfare, defined in a broad sense, runs as a connecting thread between competition and consumer protection laws. Similarly, much of the data protection law is also rooted in preserving the rights and interests of individuals. However, in the absence of clearly defined boundaries between these domains, a particular type of conduct could attract scrutiny under each of these laws.

The prohibition of “unfair” conduct or contractual terms is a clear case in point. One of the key pillars of the PDP Bill is that personal data must be processed in a “*fair and reasonable manner*” that respects the privacy of the individual.²⁰ A similar provision is also found in the European General Data Protection Regulation (GDPR), which provides that personal data must be processed “lawfully, fairly and in a transparent manner”.²¹ While there is some ambiguity around how the terms fair and reasonable would be interpreted, this provision held a significant place in the justice Srikrishna Committee's draft Bill because it was among the few obligations that would continue to apply even when a person was otherwise exempted from the application of the law. This included exemptions based on grounds like the security of the state, prevention of offences and research and statistical purposes (Bailey et al., 2018) but the 2019 Bill has unfortunately done away with this protection.

The CP Act also entitles consumers to protection against any unfair or deceptive practices that may be adopted for promoting the use or provision of any goods or services. One of the new provisions introduced in the CP Act, 2019, is that the disclosure of any personal information that is given in confidence by the consumer is regarded as a type of unfair trade practice unless the disclosure is made in accordance with the law.²²

Next, the Competition Act also lists the imposition of unfair or discriminatory terms or prices by a dominant undertaking as one of the categories of abuse of dominance. In *MCX Stock Exchange v National Stock Exchange* (2011), the CCI noted that since the term “unfair” had not been defined in the Competition Act, it had to be determined based on the facts of each case, “*either in the context of unfairness in relation to customer or in relation to a competitor*”.²³ In granting the competition agency the ability to adopt such a broad interpretation of what constitutes unfairness, the law creates scope for significant overlaps with data protection and consumer protection laws, albeit in the specific context of dominant firms.

This example of how the different laws dealing with “unfairness” illustrates the noticeable overlaps between them. At the same time, it is also possible that certain types of conduct may slip through the gaps between the laws. This may be because our laws are not crafted to anticipate the intersections between different domains or they may fail to account for the nuances of the market structure and practices in the digital economy.

For instance, in 2014, when Facebook acquired WhatsApp, the transaction had to be approved by the Federal Trade Commission in the US and by the European Commission. The same transaction, however, did not attract the scrutiny of the competition authority in India as the thresholds for scrutiny under the law are linked to asset base and turnover. This illustrates how despite the significant impact and user base of digital companies, transactions

among them could end up escaping the thresholds for review of mergers and acquisitions due to the low asset base and free service model prevalent in this industry (Uberoi, 2018; Peter, 2017).

The arrangements between Facebook and WhatsApp were, however, questioned before the CCI in 2016 when the companies announced a change in their privacy policies to facilitate the sharing of data between them.²⁴ The CCI found WhatsApp to be a dominant player in the market for “*instant messaging services using consumer communication apps through smartphones in India*”. This finding of dominance was based primarily on studies that highlighted the company’s large user base in India. However, when it came down to assessing whether the company had indulged in an abuse of its dominant position, the CCI found this not to be the case.

In arriving at this conclusion, the Commission relied on the reasoning that WhatsApp had provided users with an option to opt-out of sharing of information with Facebook within a 30 day period; it had enabled end-to-end encryption of messages and provided a commitment that none of the user information would be available “for any third party to see”. While the CCI appears to have accepted these arguments at face value, digging slightly deeper might have revealed the need for a more detailed investigation. For instance, end-to-end encryption only protects the content of the messages being exchanged between users but not the associated metadata. This would include details like the sender and receiver of the communication, timestamp, location and other similar information about the message. Given that both WhatsApp and Facebook are dominant players in their respective markets, even this sort of data sharing should have merited closer scrutiny.

The informant, in this case, had also contended that WhatsApp’s conduct was in breach of the provisions of the IT Act and violated the right to privacy.²⁵ In response, the CCI noted that allegations of breach of the IT Act do not fall within the purview of its powers under the Competition Act.

These findings can be contrasted with the decision of the German competition agency, Bundeskartellamt, earlier this year. The agency came down heavily on Facebook for its practices of combining data from its own website, other Facebook-owned companies (like WhatsApp and Instagram) as well as third party websites to generate a comprehensive profile about each user (Bundeskartellamt, 2019). It prohibited Facebook from continuing such practices unless this is done with “effective consent” from the user. Consent would be regarded as effective if the provision of Facebook’s services was not made subject to provide such consent. In arriving at these conclusions, the Bundeskartellamt noted that the law in Germany allows it to rely on principles of civil law for determining whether the terms of a contract are exploitative

in nature, which would include the application of data protection principles under the GDPR.

A regional court in Germany recently upheld a challenge brought by Facebook against this decision, which included an attack on the Bundeskartellamt's authority to apply the principles of data protection under the GDPR (Cunnane & Shanbhag, 2019). The competition authority is now in the process of appealing this decision before the German Federal Court of Justice. Needless to say, the final determination of this issue will bear useful lessons for Facebook's business model as well as the broader question of the extent to which competition and data protection laws can, and should, borrow from the principles applicable to the other.

As India moves towards the adoption of a specialised law on data protection, we can also anticipate issues of this nature to come up before courts and statutory authorities in India. It, therefore, becomes important that, in addition to reviewing potential gaps and overlaps in the substantive mandate of different agencies, we should also think more carefully about the mechanics for coordination between them. The present law contains a mechanism for references to be made by the CCI to other statutory authorities and vice versa, although the provision has rarely ever been utilised in practice.²⁶ The PDP Bill tries to go a step further by requiring that the authority created under that law *shall* consult other agencies on issues of concurrent jurisdiction and *may* also enter into memorandums of understanding (MoUs) with them.

While this is a move in the right direction, the provision needs some modifications and clarity in order for it to yield productive results (Bailey et al., 2018). For instance, the determination of whether a situation gives rise to a case of "concurrent jurisdiction" may become contentious, and it would be useful to have some clarity around this. Further, a mandatory requirement of entering into MoUs would be preferable to leaving it to the discretion of the agencies to decide who they should be entering into such arrangements with and on what terms. Ideally, the statute itself should identify the points of intersection between different agencies, particularly the proposed data protection authority and the CCI, and provide an effective framework for coordination among them.

Some lessons in this regard can be drawn from the recommendations that have been made in the context of interactions between the CCI and sectoral regulators in the financial services and telecom sectors (FSLRC, 2013; Parsheera, 2018b). The suggested mechanisms for inter-regulatory coordination may include consultations on draft regulations being issued by each agency; adoption of competition impact assessments; the presence of a non-voting member from one agency in deliberations of the other agency;

and detailed procedures for sharing of knowledge and information, subject to confidentiality conditions.

Conclusion

The digital economy is growing at an unprecedented rate, with tremendous volumes of data being generated every single day. Needless to say, the availability of this vast pool of information, combined with sophisticated tools for data processing and analysis, has created unique opportunities for data-driven innovations. At the same time, it has also led to heightened concerns regarding the informational privacy of individuals as well as the impact on competition and overall well-being of consumers. The range of interventions that can be used to address these concerns cut across the areas of competition, consumer protection and data protection laws.

The relevance of data in the digital economy is reflected not only in current business models and practices but also in the central role that data governance has come to play in recent policy debates. Given this situation, it is almost inevitable that the link between data use and consumer well-being will continue to be explored before multiple forums.

However, we find that the current legislative and regulatory framework in India offers limited insights for cross-sectional analysis of issues related to consumer welfare in digital markets. In the absence of clearly defined boundaries between the domains of competition, consumer protection and data protection, particular conduct could attract scrutiny under multiple laws. We illustrate this using the example of how each of these laws tries to address the issue of “unfairness” in dealings with consumers.

Yet, it is also likely that despite the noticeable overlaps between the laws, certain types of conducts may slip through the gaps. This could happen for two main reasons. First, the substantive provisions in the law may not be crafted to account for the nuances of the digital economy or to recognise the intersections between different domains. Second, the processes under the law may not create adequate incentives or opportunities for the statutory agencies to engage with one another.

Safeguarding individual rights and maximising consumer welfare in the digital economy, therefore, requires us to move away from the silo-based approach under existing laws towards a more integrated approach that cuts across the fields of competition policy, consumer protection, and data protection. Scope for similar interactions also exists between one and more of these fields and other laws like sector-specific regulatory frameworks and intellectual property rights.

Ultimately, the goal is to ensure that, irrespective of which agency is considering a particular issue, it should have the legal and institutional mechanisms to ensure that its analysis is informed by a range of economic and non-economic factors that shape the well-being of consumers in the digital economy.

References

- All India Online Vendors Association v. Flipkart. (2018). Case no. 20 of 2018. Competition Commission of India. Retrieved from <https://www.cci.gov.in/sites/default/files/20-of-2018.pdf>
- Bailey, R., Bhandari, V., Parsheera, S. & Rahman, F. (2018). Comments on the (draft) personal data protection bill, 2018. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3269735&download=yes
- Belaire Owner's Association v DLF Ltd. (2011). Case no. 19 of 2010. Competition Commission of India. Retrieved from <https://www.cci.gov.in/sites/default/files/DLFMainOrder110811.pdf>
- Bundeskartellamt. (2019). Background information on the Bundeskartellamt's facebook proceeding. Retrieved from https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Pressemitteilungen/2019/07_02_2019_Facebook_FAQs.html?nn=3600108
- Competition Commission of India v. Steel Authority of India Limited. (2010). Civil Appeal No. 7779 of 2010. Supreme Court of India. Retrieved from http://www.supremecourtcases.com/index2.php?option=com_content&itemid=99999999&do_pdf=1&id=19908
- Cseres, K. (2007). The controversies of the consumer welfare standard. *The Competition Law Review*, 2. Retrieved from <https://www.ssrn.com/abstract=1015292>
- Cunnane, Y. & Shanbhag, N. (2019). Why we disagree with the Bundeskartellamt. Retrieved from <https://newsroom.fb.com/news/2019/02/bundeskartellamt-order/>
- Economides, N. (2004). Competition policy in network industries: an introduction. Retrieved from <http://dx.doi.org/10.2139/ssrn.386626>
- Excel Corp Care Ltd. v. Competition Commission of India. (2017). Civil Appeal No. 2480 of 2014. Supreme Court of India. Retrieved from https://www.sci.gov.in/supremecourt/2014/3244/3244_2014_Order_08-May-2017.pdf
- Fast Track Call Cab Private Ltd. v. ANI Technologies Pvt. Ltd. (2015). Case no. 6 of 2015. Competition Commission of India. Retrieved from <https://www.cci.gov.in/sites/default/files/20-of-2018.pdf>
- FSLRC. (2013). Report on the Financial Sector Legislative Reforms Commission. Ministry of Finance, Government of India. Retrieved from https://dea.gov.in/sites/default/files/fslrc_report_vol1_1.pdf

Grunes, A. P. & Stucke, M. E. (2016). *Big data and competition policy* (1st ed.). Oxford University Press.

Hui, K.-L. & Png, I. P. (2005). Economics of privacy.

Jasper Infotech Private Limited versus KAFF Appliances (India) Pvt. Ltd. (2014). Case No. 61 of 2014. Competition Commission of India. Retrieved from <https://www.cci.gov.in/sites/default/files/61-of-2014.pdf>

Justice KS Puttaswamy (Retd.) v Union of India. (2017). WP (civ). No. 494/2012. Supreme Court of India.

Kerber, W. (2016). Digital markets, data, and privacy: competition law, consumer law and data protection. *Journal of Intellectual Property Law & Practice*, 11 (11), 856–866.

Khan, L. (2017). Amazon's Antitrust Paradox, *Yale Law Journal*, Vol. 126, 2017. Retrieved from <https://ssrn.com/abstract=2911742>

Lipsky, T., Wright, J. D., Ginsburg, D. H. & Yun, J. M. (2019). The Federal Trade Commission hearings on competition and consumer protection in the 21st century: consumer privacy, comment of the global antitrust institute, Antonin Scalia Law School, George Mason University. *George Mason Law & Economics Research Paper*, (19-05).

Matrimony.com Ltd. v Google with Consumer Unity & Trust Society v Google. (2018). Case nos. 07 and 30 of 2012. Competition Commission of India. Retrieved from <https://www.cci.gov.in/sites/default/files/07%20&%20%2030%20of%202012.pdf>

Maziarz, A. (2014). Do non-economic goals count in interpreting article 101(3) TFEU? *European Competition Journal*, 10 (2), 341–359. Retrieved from <https://doi.org/10.5235/17441056.10.2.341>

MCX Stock Exchange v National Stock Exchange. (2011). Case no. 13 of 2009. Competition Commission of India. Retrieved from <https://www.cci.gov.in/sites/default/files/DLFMainOrder110811.pdf>

Orbach, B. (2011). The antitrust consumer welfare paradox. *Journal of Competition Law & Economics*, 7. Retrieved from <https://ssrn.com/abstract=1553226>

Parsheera, S. (2018a, February). CCI's order against Google: infant steps or a coming-of-age moment? Retrieved from <https://blog.theleapjournal.org/2018/02/ccis-order-against-google-infant-steps.html>

Parsheera, S. (2018b). Challenges of competition and regulation in the telecom sector. *Economic & Political Review*, 53 (38), 45–52. Retrieved from [https://macrofinance.nipfp.org.in/PDF/Parsheera2018 Regulation-in-the-Telecom-Sector.pdf](https://macrofinance.nipfp.org.in/PDF/Parsheera2018%20Regulation-in-the-Telecom-Sector.pdf)

Parsheera, S., Shah, A. & Bose, A. (2017). Competition issues in India's online economy. National Institute of Public Finance and Policy. Retrieved from https://www.nipfp.org.in/media/medialibrary/2017/04/WP2017_194.pdf

Peter, A. (2017). Re-imagining competition policy and law in the era of disruptions. Keynote Address on World Competition Day. Retrieved from <https://www.cci.gov.in/sites/default/files/speeches/Address-World%20Competition%20Day%20Speech.pdf?download=1>

Planning Commission. (2007). Eleventh five-year plan 2007-12, Volume I. Government of India. Retrieved from http://planningcommission.gov.in/plans/planrel/fiveyr/11th/11_v1/11th_vol1.pdf

Shri Norbet Lobo v. Citibank. (2011). Case No. 15/28, 6/28, 13/28, 12/28, 2/28 (6 MRTP Cases). Competition Commission of India. Retrieved from <https://www.cci.gov.in/sites/default/files/ICICI&CitiBannkDisROrder1107110.pdf>

Srikrishna Committee. (2018, 27 July). A free and fair digital economy: protecting privacy, empowering Indians. Report of the Committee of Experts under the Chairmanship of Justice B.N. Srikrishna. Retrieved from http://meity.gov.in/writereaddata/files/Data_Protection_Committee_Report.pdf

Stigler Center. (2019). Committee for the study of digital platforms market structure and antitrust subcommittee. George J. Stigler Center for the Study of the Economy and the State.

Stucke, M. E. &Ezrachi, A. (2017). How digital assistants can harm our economy, privacy, and democracy. *Berkeley Tech. LJ*, 32, 1239.

Taylor, C. R. (2004). Consumer privacy and the market for customer information. *RAND Journal of Economics*, 631–650.

Uberoi, N. (2018). How CCI should look at M&A deals in the digital economy. Live Mint.

Retrieved from <https://www.livemint.com/Opinion/R2jJb12xH9BX9heTYleESK/How-CCI-should-look-at-MA-deals-in-digital-economy.html>

Vinod Kumar Gupta v WhatsApp Inc. (2017). Case No. 99 of 2016. Competition Commission of India. Retrieved from [https://www.cci.gov.in/sites/default/files/26\(2\)%20Order%20in%20Case%20No.%2099%20of%202016.pdf](https://www.cci.gov.in/sites/default/files/26(2)%20Order%20in%20Case%20No.%2099%20of%202016.pdf)

Waked, D. (2014). Antitrust goals in developing countries: policy alternatives and normative choices. *Seattle UL Rev.* 38, 945.

Weimer, D. L. & Vining, A. R. (2011). *Policy analysis*. Longman.

Wu, T. (2018). After consumer welfare, new what? the protection of competition standards in practice. *CPI Antitrust Chronicle*. Retrieved from <https://www.competitionpolicyinternational.com/wp-content/uploads/2018/04/CPI-Wu.pdf>

Endnotes

- 1 Excel Corp Care Ltd. v. Competition Commission of India (2017).
- 2 Shri Norbet Lobo v. Citibank (2011). A similar view was expressed by the Commission in Jasper Infotech Private Limited versus KAFF Appliances (India) Pvt. Ltd (2014), where it noted that “*economic objective of infusing competition at all levels is to ensure efficiency that leads to consumer welfare*”.
- 3 Justice KS Puttaswamy (Retd.) v Union of India (2017).
- 4 All India Online Vendors Association v. Flipkart (2018) and Fast Track Call Cab Private Ltd. v. ANI Technologies Pvt. Ltd. (2015).
- 5 Section 2(7), Consumer Protection Act, 2019.
- 6 Section 2(f), Competition Act, 2002.
- 7 This recommendation draws from the European Commission’s “Guidelines on the application of Article 81(3) of the Treaty”, which refer to “all direct and indirect users of the products...including producers that use the products as an input, wholesalers, retailers and final consumers”.
- 8 Matrimony.com Ltd. v Google with Consumer Unity & Trust Society v Google (2018).
- 9 This becomes relevant in the context of Section 19(7) of the Competition Act, which includes the “price of goods or service” as one of the pertinent factors for the assessment of the “relevant product market”.
- 10 Section 2(t), Competition Act. Consumer preferences are also among the factors to be taken into account while determining the relevant product or geographic market. See Section 19(6) and (7), Competition Act.
- 11 Section 19(3)(d), Competition Act.
- 12 Section 4, Explanation II, Competition Act.
- 13 MCX Stock Exchange v National Stock Exchange (2011).
- 14 The Committee recommended amending Section 19(3) of the Competition Act to include consumer harm in the list of factors for determining appreciable adverse effect on competition.
- 15 The committee noted that S.19(4)(b), which refers to “size and resources of the enterprise”, includes control over data.

- 16 Section 18(2)(k), Consumer Protection Act, 2019.
- 17 Section 12C and 12D, Central Excise and Salt Act, 1944.
- 18 Rule 10A, Consumer Protection Rules, 1987. The permitted uses for the fund include making grants to organisations working for the welfare of consumers; and selective grants for reimbursing legal expenses incurred by consumers.
- 19 For instance, the SEBI (Investor Protection and Education Fund) Regulations, 2009 and the Telecommunication Consumers Education and Protection Fund Regulations, 2007.
- 20 Section 5, PDP Bill
- 21 Article 5(1)(a), GDPR.
- 22 Section 2(47)(ix), Consumer Protection Act, 2019.
- 23 *Belaire Owner's Association v DLF Ltd.* (2011) is another prominent case that was decided under this provision. The CCI imposed a penalty on DLF Ltd. for the unfair terms and conditions contained in its home buyer agreements while also directing DLF to modify its agreements so as to remove the unfair conditions imposed on its buyers.
- 24 *Vinod Kumar Gupta v WhatsApp Inc.* (2017). The change in the privacy policies of WhatsApp and Facebook are also the subject of petition that is currently pending before the Supreme Court (*Karmanya Singh Sareen v. Union of India*).
- 25 It should be noted that this case arose prior to the Supreme Court's decision in *Justice KS Puttaswamy (Retd.) v Union of India* (2017) which affirmed the right to privacy to be a fundamental right.
- 26 Section 21 and 21A, Competition Act.

CHAPTER 6

Contemporary Regulatory and Competition Concerns for E-commerce in India

Background

Since sustainable economic growth is a vital component of the development strategies of all countries, especially developing countries, it is important to appreciate the development potential of electronic commerce or e-commerce. E-commerce affects the business environment at national, regional and global levels, and generates major opportunities, and new challenges, for market growth and development of jobs, industries and services. Consequently, a conducive policy environment is essential in order to secure the economic benefits of electronic commerce.

Globally, a total of US\$2.3tn was spent by retail consumers in 2017, which is expected to be more than US\$4tn by 2020.¹ The share of such expenditure on e-retail is also on the rise. According to one estimate, the Indian e-commerce market is expected to grow to US\$200bn by 2026 from US\$38.5bn as of 2017.² As of January 2019, there were about 176.8 million e-commerce users in India, which is a steep increase from 40 million such users in 2013.³

India is amongst the fastest digitalising economies of the world. According to a March 2019 report, the number of internet users as of December 2018 is pegged at 566 million and is expected to rise to 627 million by the end of 2019.⁴ The number of mobile phone users in India has recently reached the 904.25 million mark.⁵ Further, since 2013 there has been a 95 percent decline in data costs in the country and the download speed has quadrupled between 2014 and 2017.⁶

This chapter has been contributed by A Didar Singh, Senior Fellow, Delhi Policy Group (IAS Retd) and Former Secretary-General, Federation of Indian Chambers of Commerce & Industry (FICCI); and Ujjwal Kumar, Policy Analyst, CUTS International

Internet spread in India is also fast widening with rural areas catching up with their urban counterparts. Today around 40 percent of the total active internet users are from rural areas.⁷ In addition to internet penetration, the growing middle-class base in India⁸ (though it has now started showing signs of shrinkage⁹) provides a suitable environment for the growth of e-commerce. The favourable FDI policy – 100 percent FDI is allowed in business to business (B2B) e-commerce and business to consumer (B2C) marketplace model of e-commerce – further fuels this growth.

Be that as it may, the digital economy has its own risks and challenges, particularly those flowing from the market concentration that it tends to propagate. It has been observed that a significant portion of gains from the digital economy is usually cornered by very few market players (read platforms), thus enhancing inequality within and across countries. Therefore, there is a demand and need for policy and regulatory interventions that could bring in ‘inclusiveness’ in the emerging platform economy.

For instance, in theory, flourishing e-commerce can bring more opportunities for MSMEs, including farmers, to sell their products in wider geographical areas, in India and abroad. This is because it is easy and cost-effective for small businesses to use e-platforms and their logistics to widen their geographic market. Since MSMEs are important for inclusive growth, particularly for their job creation potential, the same receives policy emphasis at national and international levels.

The recently released draft National E-commerce Policy¹⁰ (the draft NEP) recognises this potential for MSMEs. Similarly, at the international level, the Joint Statement¹¹ by 76 countries confirming their intention to commence negotiations on trade-related aspects of electronic commerce under the World Trade Organisation (WTO) *inter alia* seeks to take into account opportunities and challenges faced by MSMEs. India, however, has been reluctant to join such plurilateral negotiation at the WTO (for several of its own reasons).

India has been witnessing a heightened backlash by online and offline suppliers against various e-commerce segments [including Multi Brand Retail Trading (MBRT), food & grocery, hospitality services etc.] for the last couple of years. Though digital disruption (like most market disruptions) does face opposition from incumbents, the present situation seems to be more than mere displacement of incumbents. Not only ‘offline’ traders (incumbents) are unhappy, there is growing resentment among ‘online’ traders and suppliers as well.

Therefore for the MSMEs to optimally benefit from the emerging e-commerce opportunities, the platform economy may need to be regulated carefully at

national and international levels. Given this backdrop, this chapter sheds light on some contemporary regulatory and competition concerns in e-commerce,¹² mitigating which can bring ‘inclusiveness’ in the emerging digital economy.

Regulatory Concerns

Except for rules regarding foreign direct investment (FDI) and some (mainly data related) provisions of the Information Technology Act, 2000¹³ (IT Act), which apply to e-commerce, there is perhaps no regulatory difference at present, between the online and offline retail sector. However, there are new regimes in the pipeline, for instance, the draft National E-commerce Policy¹⁴ (draft NEP), Personal Data Protection Bill, 2019 (PDP Bill), new Consumer Protection Act, 2019¹⁵ (for which rules are being framed and includes draft Consumer Protection (E-Commerce) Rules, 2019¹⁶) etc., which, once adopted/passed will significantly change the regulatory landscape vis-à-vis e-commerce in India.

While the regulatory landscape for e-commerce is still to take concrete shape, the following concerns have already formed part of the contemporary debates and discussions.

Inventory-based model vs. marketplace model

The FDI Policy (see Item 1 of the Annexure for an overview) makes a distinction between the inventory model of e-commerce and marketplace model of e-commerce and permits FDI only in the latter model. However, there are allegations by both offline and online sellers that this rule is not being followed in spirit. It is alleged that the leading foreign e-commerce entities are maintaining an indirect relationship and controlling certain suppliers on their platforms, which affect their overall sales and market access.¹⁷ The demands of both offline and online sellers are to ensure a level playing field in the retail market.

The leading foreign-funded platforms, on the other hand, claim that they are not violating the FDI policy because they are indulging only in B2B transactions, which is very much allowed under the policy.

Thus there seems to be a logjam between the two provisions of the FDI Policy – while no FDI is allowed for an inventory-model of e-commerce, 100 percent FDI is allowed for the B2B e-commerce dealings. It is understood that the Department for Promotion of Industry and Internal Trade (DPIIT) is presently looking into possible instances of FDI violation, based on the complaints raised by the Confederation of All India Traders (CAIT) and other online sellers.¹⁸

Domestic vs. Foreign

A regulatory distinction between domestic and foreign e-commerce entities has been made out. For instance, while the FDI rules disallow the inventory model for foreign firms, there is no such restriction on domestic firms. Thus domestically funded e-commerce platforms are free to have their own inventories while hosting other online sellers, thereby adopting the dual role of ‘platform service provider’ as well as competitors for the online sellers.

The proposed draft NEP (See Item 5 of the Annexure for details) also maintains such discrimination and goes ahead in applying this foreign-domestic distinction with respect to ‘access to data’ of Indian consumers. According to the draft Policy, ‘data’ of the country is analogous to natural resources that the government holds in trust, but rights to which can be permitted.¹⁹ Whereas such data can be equitably accessed by all Indians, non-Indians do not have equal rights to such access.²⁰

There are also restrictions placed on the cross-border flow of Indian consumer’s sensitive data (such as payments data) under the PDP Bill, 2019 (see Item 4 of the Annexure). Since access to data and control over the same is important for gaining and maintaining competitiveness in the digital economy, the said distinction is being seen as a protectionist measure, including the promoting or favouring of domestic firms.

Data Localisation

In April 2018 the Reserve Bank of India issued a Notification on Storage of Payment System Data²¹ (See Item 3 of the Annexure) whereby making it mandatory that the entire data relating to payment systems must be stored only in India. The RBI did this to ensure better monitoring by unfettered supervisory access to the data stored. Since, the payment system is an inherent part of any e-commerce ecosystem, particularly for the cross-border e-trade, this is seen as a hurdle by the global firms. However, off late, the firms have come to terms with it and are setting up systems to store payment data locally. The criticism was largely focused on the nexus between the objective (to have unfettered supervisory access to data) and the measure suggested (data localisation) – the question raised was whether it was necessary to store data locally in order to have unfettered access to data?

More so, the upcoming regime on data protection in the form of PDP Bill and the draft NEP favour data localisation beyond mere payment data. There are conditions on the flow of data outside India. Such provision/policy is believed to adversely affect the e-commerce ecosystem, particularly the cross-border ones.

The justification given by the proponents of data localisation is that it will help create jobs and skills nationally. Most importantly it also seems to be part of a strategy to capture a larger pie of value generated in the global digital economy. The value creation happens when data is transformed into digital intelligence and monetized through commercial use, mainly done by digital platforms. There is an impression that countries like the US and China, which mainly control the digital ecosystem, corner most of the value created in the digital economy.²²

This has led many countries to develop their own digital strategies aiming to capture a larger share of the value created in the digital economy. Such a strategy largely tends to take into account regulatory approaches towards digital data and digital platforms, calling for ‘data sovereignty’ and supporting local/domestic digital platforms. Consequently, ‘data sovereignty’ translates into ‘data localisation’ policy and support for domestic platforms expands into efforts to create globally competitive national champions or domestically created (and controlled) digital ecosystem.

Looking at the upcoming data governance regime, including the draft e-commerce policy, India seems to be following a strategy of creating its own globally competitive digital ecosystem so that it can capture a much bigger pie of the value created in the digital economy.

Competition Concerns in e-Commerce

Since the e-commerce ecosystem is dependent on many sectors, such as telecom, retail, postal, finance, etc., competition concerns in any of these sectors can have anti-competitive effects on e-commerce. Though the scope of this chapter does not include the broader e-commerce ecosystem, it does take into account those competition concerns that directly impact the digital economy in general, and e-commerce, in particular. Such competition concerns in e-commerce can be divided into two broad categories – infrastructural and transactional.

Infrastructure-related Concerns

Access to the internet

In the era, where vertical integration is gaining momentum, any restriction or discrimination in access to the internet could result in anti-competitive effects in e-commerce, thus mandating ‘net neutrality’ from a competition perspective. For instance, in e-commerce related to streaming services there can be competition concerns when internet service providers (ISPs) are also content providers or ISPs vertically integrating with content providers giving special treatment such as free, easy or fast connectivity over their competitors.

Similarly, mobile operating systems and internet browsers can indulge in discriminatory practices with respect to e-commerce entities. Mobile manufacturers can also discriminate in the form of pre-loaded 'Apps'. Those discriminating may argue that since such services are free of charge and since consumers have a choice to switch over, hence such practices are not anti-competitive or anti-consumer.

While switching behaviour may have limited effects, the zero price argument is generally countered by the fact that consumers provide valuable data to platforms, which in turn helps them enhance their competitiveness in the digital economy that is witnessing a significant increase in data-driven business models. The Competition Law Review Committee (CLRC) has also clarified in its Report²³ (published in August 2019) that the definition of 'price' in the Competition Act, 2002 is wide enough to include non-monetary consideration in the form of 'data', since it refers to every valuable consideration, whether direct or indirect.²⁴

Access to data

The 'new economy' is characterised by huge economies of scale and scope as well as network externalities that fuel the 'winner-takes-most' phenomenon thereby favouring market concentration. Not only is the importance of 'access to data' in the digital economy well established, but competition policy discourses have also begun to demand 'control over data' and 'network externalities' to be included as elements of market power determination. Enhanced access to data, including by 'data portability' and 'interoperability' is being flagged as possible solutions to counter increasing concentration due to the propagation of the digital economy. There are pressing calls for retooling of competition enforcements because traditional competition assessment tools are not helping much.

The CLRC, in its Report, observes that "any discussion on the antitrust implications of the new age economy is incomplete without assessing the accumulation and use of data by data-rich incumbents in the digital market".²⁵ The Committee recommends the inclusion of 'control over data' and 'network effects' as factors for determining 'dominant position'.²⁶ The PDP Bill, 2019 has a provision on data portability.²⁷ In the context of the merger control framework, the Committee suggests the inclusion of 'size of transaction' or 'deal value' – a shift from current provisions of an asset or turnover-based threshold, which led to many mergers of tech companies getting through without scrutiny.

Platform neutrality

Big tech firms and platforms are not only gatekeepers of the digital economy but are also *de facto* regulators influencing market behaviour. In this context,

‘platform neutrality’ refers to non-discriminatory treatment by the platform towards all the sellers that are linked to it. Platforms tend to undertake the dual role of platform service providers as well as a competitor of suppliers on its platform. This phenomenon increases the chances of breaching platform neutrality and hampering competition in the market place. This is the reason that FDI Rules do not allow any FDI in the inventory-based model of e-commerce while allowing 100 percent FDI in the marketplace model.

The interim observations of market study on e-commerce in India conducted by the Competition Commission of India (CCI), have also found a compromise on ‘platform neutrality’ (due to inventory model/dual role of platforms) in ‘online food delivery’ and ‘online hotel booking’ as well as in online retail (despite FDI policy restricting it).²⁸

Transaction-related Competition Concerns

Relevant market

The first question that arises is “whether online shops and traditional brick and mortar shops constitute the same market?” The CCI has been largely maintaining till recently that “these two markets are different channels of distribution of the same product and are not two different relevant markets”.²⁹

However, very recently, in *All India Online Vendors Association (AIOVA) vs. Flipkart*,³⁰ it held “services provided by online marketplace platforms” as a relevant product market. Rejecting the contention that platforms are mere alternate distribution channel to offline distribution, the Commission observed that:

“...there is a difference between online retail stores and an online marketplace platform. In the online retail store, a particular seller, who may or may not own a brick and mortar retail store, owns his portal to sell products through an online website. Whereas in an online marketplace platform such as Amazon or Flipkart, the owner of the online portal offers a platform for buyers and sellers to transact. Hence, the sellers would be interested in selling on the platforms when an increasingly high number of buyers visit an online platform, thus characterising the online platforms with network effects. In the case of online retail stores, there are hardly any network effects though there may be efficiencies of scale.”³¹

The CCI ruled on similar lines very recently in *Federation of Hotel & Restaurant Associations of India vs. MakeMyTrip India Pvt. Ltd. and others*,³² where it observed that “in case of platform markets, where the platforms may be serving many sets of consumers and maybe having multitude of relationships with these consumers, the

*consumer-side for which the relevant market is being defined needs to be identified.”*³³ In this case, involving hotel booking, the CCI further observed that “*the online mode of distribution through third-party platforms, which provide the facility to search, compare and book at the same place, is characteristically distinct from the services that the offline mode such as travel agents provide*” and hence held ‘market for online intermediation services for booking of hotels in India’ as a relevant market.³⁴

Predatory pricing

‘Predatory pricing’ is one of most cried about competition concerns in e-commerce today. Both offline and online sellers are at loggerheads with the e-commerce marketplaces and are quite agitated about Government failing to stop deep discounting by platforms and allegedly not enforcing FDI rules in spirit. Since mobile handsets constitute around 45-50 percent of the total transaction value of e-commerce in India,³⁵ offline mobile handset retailers seem to be the biggest victims of such ‘predatory pricing’.³⁶

Earlier, the CCI had also looked into predatory pricing allegation raised by the AIOVA against Flipkart³⁷. The issue of predatory pricing is dealt with under the ‘abuse of dominance’ provisions of the Competition Act. Since the dominance of Flipkart (or Amazon) could not be established in the relevant market, hence there was no question of ‘abuse’ of dominance, including predatory pricing. The CCI observed that “*looking at the present market construct and structure of online marketplace platforms market in India, it does not appear that any one player in the market is commanding any dominant position at this stage of evolution of the market.*”³⁸

The CCI has been cautious of over-intervention so as not to disturb the emerging e-commerce ecosystem when it observes that “*the marketplace based e-commerce model is still a relatively nascent and evolving model of retail distribution in India and the Commission is cognizant of the technology-driven nature of this model. Recognizing the growth potential as well as the efficiencies and consumer benefits that such markets can provide, the Commission is of the considered opinion that any intervention in such markets needs to be carefully crafted lest it stifles innovation.*”³⁹

It may be noted that earlier the Competition Appellate Tribunal (COMPAT) allowing an appeal⁴⁰ against a CCI’s decision (in *Meru vs. Uber*⁴¹), held that to assess the dominant position, CCI should have also taken into account factors other than market share, such as the availability of financial resources, global developments, discounts and incentive offered.⁴²

Upon appeal, the Supreme Court of India, further substantiating the COMPAT findings, observed that loss per trip by Uber “*does not make any economic sense other than pointing to Uber’s intent to eliminate competition in the*

market”.⁴³ According to the Court, since such losses can affect its competitors or market in its favour, this *prima facie* indicates its position of strength.

It would be interesting to note if the same logic is applied by the CCI in dealing with deep discounts by e-commerce platforms since online and offline traders associations have approached the CCI afresh alleging “unethical competition” perpetrated by e-commerce firms, wherein CCI has reportedly said that “*it is committed to establishing a uniform and competitive business environment in the country and if anyone adopts unhealthy trading practices, influencing prices in any manner, the Commission will surely take action as per law*”.⁴⁴

The CCI may also issue a soft advisory to platforms to address the all-round concern, including deep discounting and predatory pricing.⁴⁵ However, the CCI has made it clear that discounting, including selling below cost, need not necessarily mean predatory pricing.⁴⁶

Recently, the Ministry of Commerce and Industry has agreed to look into the menace of ‘deep discounting’ after complaints by the CAIT and the All India Mobile Retailers Association citing violation of FDI Rules by e-commerce platforms.⁴⁷ According to the Minister “*the central government has made clear cut guidelines in e-commerce... if anybody tries to use the route of multi-brand retail, then strict action will be taken. E-commerce is a marketplace platform. E-commerce companies have no right to discount their products. They have no right to harm small retailers by using the method of predatory pricing.*”⁴⁸ The CAIT, which has announced a nationwide protest,⁴⁹ also called for a probe into the alleged ‘unholy nexus’ between e-commerce firms and banks.⁵⁰

Exclusive agreements

Like predatory pricing allegations in the form of deep discounting, the exclusive arrangement between e-portals and manufacturers is also under attack. Though, as per the FDI Rules, e-commerce market place entity will not mandate any seller to sell any product exclusively on its platform, it is not clear whether this can stop manufacturers to sell their products exclusively on a platform.

The CCI had earlier dealt with exclusive agreements in *Manglani vs. M/s Flipkart India Private Limited and Others*⁵¹, where the Complainant dragged in almost all the e-portals operating in India. It was alleged that these e-portals have been indulging in “exclusive agreements” which harms consumers’ choice. The e-portals submitted that exclusivity, if any, is limited to online portals and not vis-à-vis brick and mortar stores. The CCI did find the presence of exclusive arrangements, however, it could not establish any appreciable adverse effect on competition, as per the laid down criterion.

Resale price maintenance

Resale price maintenance (RPM) is an anti-competitive agreement whereby the retailer is obliged to sell at a predetermined price fixed by the suppliers/manufacturers. The CCI looked into the issue of RPM, among others, in *Ashish Ahuja vs. Snapdeal*⁵² and *M/s Jasper Infotech Private Limited (Snapdeal) Vs. M/s Kaff Appliances (India) Pvt. Ltd.*⁵³

In *Ashish Ahuja*, the complainant, who used to sell various computers and its accessories like pen drive and hard disks, on an e-commerce platform Snapdeal, was removed from the platform. Snapdeal cited the reason that the manufacturer (ScanDisk) insisted that the storage device sold through the platform should be bought from its authorised dealer in order to avail after-sale service warranties. The complainant alleged that by this practice, Snapdeal and ScanDisk are indulging in RPM, curtailing the freedom of sellers to offer better prices to consumers. The CCI identified brand image and goodwill as important concerns in a quality-driven market and hence observed that ScanDisk is within its rights to protect the sanctity of its distribution channel. Accordingly, it rejected the allegation of RPM.

However, in *Jasper Infotech*, with similar facts as above, the CCI had a *prima facie* opinion that Kaff Appliances was involved in RPM and ordered an inquiry. In this case, Kaff Appliances had written to Snapdeal that it would not extend warranties to the products sold by unauthorised dealers or distributors. However, after taking into account the inquiry report, the CCI found that Kaff's measure was due to a genuine concern for the existence of counterfeit products on Snapdeal's website and was not, therefore, the result of RPM.

Parallel imports

The product (pen drive) involved in *Ashish Ahuja* seems to have been obtained through parallel import. ScanDisk had made it clear that it does not authorise, endorse or support parallel importation, which prompted Snapdeal to remove Ashish Ahuja from its e-portal.

Given the flexibility provided under Article 6 of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights, different countries have adopted different regimes with respect to parallel imports. India follows international exhaustion of Intellectual Property Rights, except in case of copyright, thus putting ScanDisk position under question. This issue neither was raised before the CCI nor was it deliberated *suo motu*.

Recently the CCI in *Matrix Info vs. Intel*⁵⁴ has taken seemingly a correct stand with respect to parallel importation, which could also be applied in

e-commerce cases. In this case, the informant is a parallel importer of Intel Microprocessor, which got interrupted when Intel amended its warranty policy for India in 2016. As per this new policy, Intel would entertain warranty requests for the product in India only when it is from an authorised Indian distributor of Intel, that too within the country.

The CCI came to *prima facie* opinion that the conduct of Intel has the potential to lead to denial of market access to the parallel importers and resellers of the relevant product, who are competitors of Intel's Indian authorised distributors. It also felt that such differentiated warranty policy will also limit the choice for the Indian consumers and may lead to the risk of prevalence of higher prices. Based on its *prima facie* opinion, the CCI ordered an in-depth investigation.

It may be noted that the interim observations in the CCI's market study on e-commerce⁵⁵ suggest that manufacturers are concerned about the sale of counterfeit versions of their goods on e-commerce platforms. Such concerns are also from the consumers' side, which tends to reduce consumers' trust in online markets having an adverse effect on the growth prospects of e-commerce.

The draft National E-commerce Policy, 2019 and draft Consumer Protection (E-Commerce) Rules, 2019 have also taken cognizance of counterfeiting and suggested measures to deal with the same. However, some of the provisions seem to be possibly giving the trademark owner more powers than required, which in turn could hamper parallel importing and hence can reduce intra-brand competition. For instance, according to the draft NEP, e-commerce platforms shall not list or offer for sale, any of the TM owners' products without the prior concurrence, if such owners desire. This clearly exceeds the regulatory optimality and also goes against the spirit of CCI's decision in *Matrix*. Similarly, the draft e-commerce guidelines tend to hold the sellers on such platforms responsible for any warranty/guarantee obligation of goods, while it should be the responsibility of manufacturers. Such provisions would discourage parallel importation and adversely affect intra-brand competition.

Unlike the US, which follows the national exhaustion principle, and the EU, which follows the regional exhaustion principle, India follows international exhaustion of intellectual property rights (except that in copyright). Therefore, India has to develop its own regulation and jurisprudence which needs to be facilitative to parallel imports.

Conclusion

From the above discussions, it becomes clear that most of the regulatory concerns and competition concerns are closely interlinked. In this context, one pertinent question that is often asked is: whether to adopt an *ex-ante* regulatory approach to tackle such concerns, or to rely upon *ex-post* case-by-case competition enforcement approach? The answer is that we need both for the best solution. While competition enforcement can continue (particularly taking into account deliberations by the CLRC *vis-à-vis* new age market), the *ex-ante* regulatory approach that needs to be crafted very carefully withstanding the test of ‘optimality’. The CCI has an important advocacy role to play in this.

It seems that the dual role of platforms (inventory-model of e-commerce) is perhaps the genesis of most regulatory and competition concerns. This menace is unlikely to be tamed solely by case-to-case enforcement by the CCI and may require an overarching *ex-ante* Platform-to-Business (P2B) regulation. Such P2B regulation could address general small businesses’ concerns in their interaction with dominant platforms, which include: the possible adoption of discriminatory practices by platforms to favour specific service providers; unreasonable pricing that deters small service providers; lack of transparency in the listing of goods and services; changes in terms and conditions by platforms without prior notice; and unilateral delisting/suspension of accounts, among others.⁵⁶

Interestingly, the CCI Chairperson, addressing the Meeting of High-Level Representatives of Asia-Pacific Competition Authorities in Paris on December 4, said that “*the Commission, as a pre-emptive or precautionary measure, may issue a soft advisory to e-commerce platforms to self-regulate certain aspects of their practices to foster trust and a predictable relationship with the business users so that full competitive potential of e-commerce can be harnessed*”.⁵⁷ Such a soft advisory may include certain transparency commitments on the part of e-commerce platforms over ‘ranking’, ‘data’ and ‘review and rating mechanisms’.

Similarly, ending a monopoly over data, which leads to monopolistic situations in digital markets, can also be part of the solution. After ‘data’ has been anonymised to maintain the right to privacy, the same can be shared with other entities in the digital economy. NITI Aayog, the government policy think tank, has made a proposal on these lines for the Fintech sector, which is likely to be extended to other sectors like e-commerce, health, education etc.⁵⁸

In addition to the above-said, adoption of the sector-neutral National Competition Policy can also aid in introducing competition reforms in different e-commerce segments. The emerging digital strategy of India can be seen from the competition lens and recommendations be made whether elements of such strategy are pro-competition or are market distortive. Such a competition policy whole-of-government approach will not only help in having optimal regulation(s) in place but would also achieve better coordination between the CCI and other regulatory agencies as well as amongst various regulations on e-commerce most of which are in the pipeline.

Overall, India is well on its way of developing a robust e-commerce ecosystem where the regulatory environment must be seen as one that supports the digital economy while ensuring 'inclusiveness'. Even globally, e-commerce rules and regulations are still evolving, as is the technology, and its only time that will tell us the success such policies have in ensuring a healthy and sustainable digital economy.

Annexure 6.1

Salient Features of existing/upcoming laws/policies related with e-commerce

The following are salient features of the laws/policies that have been mentioned in this chapter.

1. FDI rules and e-commerce

The Consolidated FDI Policy, 2017⁵⁹ (FDI Policy) and the clarifying Press Note 2 of 2018⁶⁰ (PN2), regulates e-commerce from foreign investment perspective. The FDI policy allows, with some conditions, 100 percent FDI for “Cash & Carry Wholesale Trading/Wholesale Trading.”⁶¹ The Policy further makes distinction between ‘Single Brand Product Retail Trading’ and ‘Multi Brand Retail Trading’. While in SBRT 100 percent FDI is allowed,⁶² in MBRT only up to 51 percent FDI is allowed, that too with more stringent conditions.

The PN2,⁶³ which clarifies the ‘e-commerce’ provisions of the FDI Policy, defines e-commerce as “buying and selling of goods and services including digital products over digital & electronic network”.⁶⁴ It also defines an ‘e-commerce entity’. According to the PN2, though 100 percent FDI in e-commerce activities allowed,⁶⁵ e-commerce entities can engage only in Business to Business (B2B) e-commerce and not in Business to Consumer (B2C) e-commerce.⁶⁶ In addition, for such B2B e-commerce, guidelines/conditions on cash and carry wholesale trading as given in the FDI Policy will also apply.

Further, the PN2 distinguishes between inventory-based model⁶⁷ and marketplace-based model⁶⁸ of e-commerce. While 100 percent FDI is permitted in marketplace model of e-commerce, no FDI is allowed in inventory-based model.⁶⁹ In addition, the following conditions, among others, are also applicable:

- Marketplace e-commerce entities can enter into transactions with sellers registered on its platform on B2B basis.⁷⁰
- E-commerce marketplace may provide support services (like warehousing, logistics, order fulfilment, payment collection etc.) to sellers,⁷¹ but the same need to be in a fair and non-discriminatory manner.⁷²
- E-commerce entity providing marketplace cannot exercise ownership or control over any vendor on its platform. Inventory of a vendor

will be deemed to be controlled by e-commerce marketplace entity if more than 25 percent of purchases of such vendor are from e-commerce marketplace entity or its group companies.⁷³

- Entities, in which the group e-commerce entity or its group companies have equity participation or whose inventory is controlled by the e-commerce marketplace entity or its group companies, will not be allowed to sell its products on the platform of such marketplace entity.⁷⁴
- E-commerce entities providing marketplace shall refrain from influencing the sale price of goods or services, directly or indirectly, and shall maintain level playing field.⁷⁵
- E-commerce market place entity will not mandate any seller to sell any product exclusively on its platform only.⁷⁶

2. Information Technology Act, 2000

Flow of user's data is life and blood for e-commerce to thrive, therefore regulation of data flow has direct bearing on the e-commerce sector. At present the Information Technology Act, 2000⁷⁷ (IT Act) provides the legal basis for such regulation. The IT Act aims *inter alia* at providing "legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as—electronic commerce". The Act has extra territorial jurisdiction.

The IT Act defines 'data', 'information' and 'intermediary', which is important for any discussions on e-commerce. Since platforms would fall within the definition of 'intermediary',⁷⁸ they have certain legal obligations with respect to 'data' and 'information'. The intermediaries are required to preserve and retain information for prescribed duration and format,⁷⁹ and are liable to compensate the person affected, if they fail to protect 'sensitive personal data' due to negligence of the controller of such data.⁸⁰

The IT Act also prescribes punishment, which includes imprisonment, for disclosure of information in breach of any lawful contract. The Act, however, exempts intermediaries from liability for any third party information, data, or communication link made available or hosted by him in certain cases.⁸¹

The intermediaries are also governed by the *Information Technology (Intermediaries guidelines) Rules, 2011*,⁸² notified under the IT Act.⁸³ These provide for certain due diligence to be observed by the intermediaries, such as to publish its rules and regulations, and privacy policy as well as not to host or share certain types of information. Some amendments have also been proposed to the intermediaries rules, which if adopted then intermediaries with more than five million users in India will have to be a company incorporated under Indian law with a permanent registered

office in India and physical address. The amendment would also require such intermediary to appoint a nodal person in India for coordination with law enforcement agencies.⁸⁴

3. RBI Notification on Storage of Payment System Data

In April 2018 the Reserve Bank of India issued a notification on Storage of Payment System Data⁸⁵ under Section 10(2) read with Section 18 of Payment and Settlement Systems Act 2007.⁸⁶ The notification states that: *“In order to ensure better monitoring, it is important to have unfettered supervisory access to data stored with these system providers as also with their service providers / intermediaries/ third party vendors and other entities in the payment ecosystem”*. For this purpose, RBI decided that: *“All system providers shall ensure that the entire data relating to payment systems operated by them are stored in a system only in India. This data should include the full end-to-end transaction details/information collected/carried/ processed as part of the message/payment instruction. For the foreign leg of the transaction, if any, the data can also be stored in the foreign country, if required”*.

4. Personal Data Protection Bill, 2019

Taking cognizance of the growing importance of data protection in India and the need to ensure growth of the digital economy, the Government of India, in July 2017, decided to constitute a Committee of Experts (the Committee) under the Chairmanship of Justice B N Srikrishna to identify key data protection issues in India and recommend methods of addressing them.⁸⁷ Soon after the constitution of the Committee, the Supreme Court of India in August, 2017 delivered its landmark judgement in the case of *Justice KS Puttaswamy and another vs. Union of India and others*, declaring “right to privacy” to be part of the fundamental “right to life” under Article 21 of the Constitution of India.⁸⁸ This judgement induced and added fuel to the public debate on data privacy and protection.

In July 2018, the Committee submitted to the Government its Report⁸⁹ titled “A Free and Fair Digital Economy – Protecting Privacy, Empowering Indians” along with a draft Personal Data Protection Bill.⁹⁰ Based on the comments received on the draft Bill, the government in December 2019 introduced the Personal Data Protection Bill, 2019⁹¹ (PDP Bill) in the Lok Sabha, after which it has been referred to a joint select committee of the Parliament. The Bill is expected to come up in the Parliament for passage in the next session (February 2019) after the joint select committee submits its report. The following paragraphs provide an overview of the PDP Bill, 2019.

The PDP Bill, 2019 *inter alia* seeks to “create a collective culture that fosters a free and fair digital economy, respecting the informational privacy of individuals, and ensuring empowerment, progress and innovation through digital governance and inclusion”.⁹²

Data protection obligations: Personal data has to be processed for any specific, clear and lawful purpose⁹³ and in a fair and reasonable manner that respects the privacy of the data principal.⁹⁴

There is also limitation on the collection of personal data i.e. necessary for the purpose of processing.⁹⁵ The data fiduciary will have to give notice to data principal, in a clear and concise manner, at the time of collection of the personal data, which includes *inter alia* the purpose for which it collected, with whom such data would be collected, information regarding cross-border flow of data etc.⁹⁶

Rights of data principal: The PDP Bill specifies a number of rights of data principal, which *inter alia* include: right to confirmation and access,⁹⁷ right to data portability⁹⁸ (right to receive personal data in a structured, commonly used and machine-readable format and right to transfer the above-mentioned personal data to any other data fiduciary.), and right to be forgotten.⁹⁹

Transparency and accountability measures: Measures with respect to transparency and accountability that the data fiduciary has to follow include: privacy by design¹⁰⁰ and maintenance of transparency.¹⁰¹ Further, if processing involves new technologies or large scale profiling or use of sensitive personal data, data fiduciary will have to undertake a “data protection impact assessment” before commencing such processing.¹⁰²

Every data fiduciary will have a data protection officer to carry out various given functions.¹⁰³ Every data fiduciary will have to put in place proper procedures and effective mechanisms to address grievances of data principals.¹⁰⁴

Cross-border transfer of personal data: Though sensitive person data can be transferred outside India on certain conditions, it has to be stored within India.¹⁰⁵

In addition, the government is also empowered to notify certain categories of personal data as ‘critical personal data’, which may only be processed in servers/data centres located in India.

Data Protection Authority: A Data Protection Authority will be established for the purposes of this Act, which will have a Chairperson and not more than six whole-time Members.¹⁰⁶

5. Draft National E-Commerce Policy, 2019

On 23rd February 2019, the Government issued draft National e-Commerce Policy,¹⁰⁷ bearing tag line “India’s Data for India’s Development”, emphasises the importance of data in the digital economy. The draft policy is in the process of finalisation.

According to the draft Policy, e-commerce includes “buying, selling, marketing or distribution of (i) goods, including digital products and (ii) services, through electronic network”. The draft policy seeks, among other things, to create a regulatory environment to ensure that there is genuine competition in the market, which encourages entrepreneurship and innovation. It addresses six broad issues related with e-commerce: data, infrastructure development, e-commerce marketplaces, regulatory issues, stimulating domestic digital economy, and export promotion through e-commerce.¹⁰⁸

Data: ‘Data’ of the country is analogous to natural resources that can be best thought of a collective resource, that the government holds in trust, but rights to which can be permitted.¹⁰⁹ Also, national data is a national resource that is to be equitably accessed by all Indians, while non-Indians do not have equal rights to such access.¹¹⁰

It also advocates for data localisation, which, according to it, is necessary for the creation of high-value digital products in the country and also for creating jobs. The draft policy proposes the creation of a legal and technological framework to impose restrictions on cross-border data flow (including data generated by users in India on ecommerce platforms, social media, search engines etc.) and also imposes several conditions on business entities collecting or processing any sensitive data such as consumers’ payments data.¹¹¹

Further, it calls for the development of a suitable framework for sharing of community data that serve the larger public interest with start-ups and firms.¹¹²

Regulation of marketplace: The draft NEC Policy endorses the FDI Policy in e-commerce, which, according to it, has been developed “to ensure that the marketplace provides a level playing field to all participants while ensuring that distortionary effects, either through means of price control, inventory or vendor control does not happen”.¹¹³

It further discourages capital dumping and business models that are discriminatory to online vendors. As per the draft policy, all e-commerce platforms available for download in India must have a registered entity in India in order to ensure compliance with laws and for preventing deceptive

and fraudulent practices, protection of privacy, safety and security.¹¹⁴ It also prescribes e-commerce entities to undertake certain measures in order to prevent the sale of counterfeit products, which, among others, include:¹¹⁵

- An undertaking by the sellers to the platform about the genuineness of products
- E-commerce platforms to give options to trademark (TM) owners to register themselves
- E-commerce platforms shall not list or offer for sale, any of the TM owners' products without the prior concurrence if such owners desire
- In certain products, e-commerce marketplaces would have to seek TM owner's authorisation before listing the product
- Upon receiving the complaint the platform to inform TM owner within 12 hours
- Marketplaces would have liability to return the amount paid by the customer in case of counterfeit complaints

6. New Consumer Protection Act and E-Commerce

A new Consumer Protection Act, 2019¹¹⁶ came into effect in August 2019, for which rules are being framed. It defines 'e-commerce' as buying or selling of goods or services including digital products over digital or electronic network, and 'electronic service provider' as a person who provides technologies or processes to enable a product seller to engage in advertising or selling goods or services to a consumer and includes any online market place or online auction sites. E-Commerce platforms (or even social media platforms) will qualify as 'electronic service provider'. The CP Act, 2019 bestows various rights to consumers, including the right to seek redressal against unfair trade practices or restrictive trade practices.

The draft Consumer Protection (E-Commerce) Rules, 2019¹¹⁷ have been published, which will be finalised after taking into account the public comments received on the same. The draft Rules set general conditions for carrying out e-commerce business, which includes platforms to comply with the IT (Intermediaries guidelines) Rules, 2011 and with the guidelines of the Reserve Bank of India on payments. It also provides for liabilities of e-commerce entities and sellers on platforms as well as consumer grievance redress procedure.

Endnotes

- 1 World Bank, Unleashing E-Commerce for South Asian Integration; <https://openknowledge.worldbank.org/handle/10986/32718>
- 2 <https://www.ibef.org/industry/ecommerce.aspx>
- 3 https://meity.gov.in/writereaddata/files/india_trillion-dollar_digital_opportunity.pdf
- 4 <https://economictimes.indiatimes.com/tech/internet/internet-users-in-india-to-reach-627-million-in-2019-report/articleshow/68288868.cms>
- 5 <http://dot.gov.in/sites/default/files/statistical%20Bulletin-2018.pdf?download=1>
- 6 www.mckinsey.com/~/media/mckinsey/business%20functions/mckinsey%20digital/our%20insights/digital%20india%20technology%20to%20transform%20a%20connected%20nation/digital-india-technology-to-transform-a-connected-nation-full-report.ashx
- 7 <https://www.livemint.com/industry/telecom/internet-users-exceed-500-million-rural-india-driving-growth-report-1552300847307.html>
- 8 The number of households with a disposable income of more than \$10,000 has leapt from around 2.5 million in 1990 to nearly 50 million in 2015, according to Euromonitor International; <https://www.weforum.org/agenda/2016/11/6-surprising-facts-about-india-s-exploding-middle-class/>
- 9 <https://www.livemint.com/politics/policy/the-shrinking-of-india-s-middle-class-11572505342371.html>
- 10 <https://dipp.gov.in/whats-new/draft-national-e-commerce-policy-stakeholder-comments>
- 11 WTL/1056; dated 25 January 2019 <https://ustr.gov/sites/default/files/files/Press/Releases/20190125-joint-statement-on-electronic-commerce.pdf>
- 12 The scope in this chapter is mainly e-commerce in multi-brand retail segment.
- 13 <https://indiacode.nic.in/bitstream/123456789/1999/3/A2000-21.pdf>
- 14 <https://dipp.gov.in/whats-new/draft-national-e-commerce-policy-stakeholder-comments>
- 15 <https://consumeraffairs.nic.in/sites/default/files/CP%20Act%202019.pdf>
- 16 <https://consumeraffairs.nic.in/draft-rule>
- 17 <https://www.thenewsminute.com/article/flipkart-bought-goods-worth-rs-39k-crore-fy19-why-it-violates-india-s-fdi-norms-111902?amp>
- 18 https://m.economictimes.com/industry/services/retail/stop-predatory-pricing-piyush-goyal-tells-ecommerce-companies/amp_articleshow/71964059.cms
- 19 p14, draft NEC Policy.
- 20 p14-15, draft NEC Policy.
- 21 <https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=11244>

- 22 Two countries – the U.S. and China – together corner 90% of market capitalisation value of the world’s seventy (70) largest digital platforms; *Digital Economy Report, 2019*; https://unctad.org/en/PublicationsLibrary/der2019_en.pdf
- 23 http://www.mca.gov.in/Ministry/pdf/ReportCLRC_14082019.pdf
- 24 *Ibid*, page 152
- 25 *Ibid*, page 151
- 26 *Ibid*, page 157
- 27 Section 19
- 28 https://www.cci.gov.in/sites/default/files/whats_newdocument/Interimobservations_30August2019.pdf
- 29 For instance see: *Ashish Ahuja v. SnapDeal* (Case No.14 of 2014) and *Manglani v. Flipkart* (Case No. 80 of 2014)
- 30 Case No. 20 of 2018
- 31 *Ibid*, para 24, page 9
- 32 Case No. 14 of 2019
- 33 *Ibid*, para 35
- 34 *Ibid*, para 41
- 35 As estimated by India Cellular & Electronics Association
- 36 <https://retail.economictimes.indiatimes.com/news/consumer-durables-and-information-technology/mobiles/its-a-black-diwali-for-small-handset-retailers-due-to-rampant-online-discounting/71700966>
- 37 Case No. 20 of 2018
- 38 Para 29, page 10, *Ibid*
- 39 Para 34, page 12, *Ibid*
- 40 Appeal No. 31 of 2016
- 41 Case No. 96 of 2015
- 42 <https://khaitanco.sharefile.com/share/view/saf0fd5cf7994b9b9>
- 43 https://sci.gov.in/supremecourt/2017/2103/2103_2017_5_2_16524_Judgement_03-Sep-2019.pdf
- 44 <https://economictimes.indiatimes.com/industry/services/retail/cait-cci-discuss-unethical-competition-by-e-commerce-firms/articleshow/71652501.cms?from=mdr>
- 45 https://www.business-standard.com/article/economy-policy/cci-to-give-e-commerce-firms-advisory-on-discounts-as-trader-protests-grow-119101801600_1.html
- 46 <https://tech.economictimes.indiatimes.com/news/internet/cci-urges-ecommerce-platforms-to-be-transparent/71931804>

- 47 <https://www.livemint.com/politics/policy/piyush-goyal-warns-action-against-e-commerce-companies-if-found-guilty-11571336389440.html>
- 48 *Ibid*
- 49 <https://yourstory.com/2019/11/cait-protest-amazon-flipkart-ecommerce-giants>
- 50 <https://retail.economictimes.indiatimes.com/amp/news/e-commerce/e-tailing/cait-demands-high-level-enquiry-by-govt-to-probe-unholy-nexus-of-e-commerce-companies-banks/72000378>
- 51 Case No. 80 of 2014
- 52 Case No.14 of 2014
- 53 Case No. 61 of 2014
- 54 Case No. 05 of 2019
- 55 https://www.cci.gov.in/sites/default/files/whats_newdocument/Interimobservations_30August2019.pdf
- 56 <https://www.livemint.com/opinion/online-views/opinion-an-optimal-way-to-ushe-small-businesses-into-the-digital-age-1556214402619.html>
- 57 E-commerce and Challenges for Antitrust Enforcement; <https://www.cci.gov.in/sites/default/files/speeches/SpeechChairperson-AntitrustEnforcement.pdf?download=1>
- 58 NITI Ayog bats for ending data monopoly; Economic Times, May 17, 2019 <https://economictimes.indiatimes.com/news/economy/policy/niti-aayog-bats-for-ending-data-monopoly/articleshow/69364496.cms>
- 59 https://dipp.gov.in/sites/default/files/CFPC_2017_FINAL_RELEASED_28.8.17_1.pdf
- 60 https://dipp.gov.in/sites/default/files/pn2_2018.pdf
- 61 Para 5.2.15.1 of the Consolidated FDI Policy, 2017
- 62 Para 5.2.15.3 of the Consolidated FDI Policy, 2017
- 63 Issued on 26 December 2018 in order to provide clarity to FDI Policy on e-commerce sector and is in force since 01 February 2019.
- 64 Para 5.2.15.2.2 (i) of Press Note 2 of 2018
- 65 Para 5.2.15.2 of Press Note 2 of 2018
- 66 Para 5.2.15.2.1 of Press Note 2 of 2018
- 67 As per para 5.2.15.2.2 (iii) of Press Note 2 of 2018, inventory based model of e-commerce means an e-commerce activity where inventory of goods and services is owned by e-commerce entity and is sold to the consumers directly.
- 68 As per para 5.2.15.2.2 (iv) of Press Note 2 of 2018, marketplace based model of e-commerce means providing of an information technology platform by an e-commerce entity on a digital & electronic network to act as a facilitator between buyer and seller.
- 69 Para 5.2.15.2.3 of Press Note 2 of 2018

70 Para 5.2.15.2.4(ii) of Press Note 2 of 2018

71 Para 5.2.15.2.4(iii) of Press Note 2 of 2018

72 Para 5.2.15.2.4(ix) of Press Note 2 of 2018

73 Para 5.2.15.2.4(iv) of Press Note 2 of 2018

74 Para 5.2.15.2.4(v) of Press Note 2 of 2018

75 Para 5.2.15.2.4(ix) of Press Note 2 of 2018

76 Para 5.2.15.2.4(xi) of Press Note 2 of 2018

77 <https://indiacode.nic.in/bitstream/123456789/1999/3/A2000-21.pdf>

78 See Section 2(w), IT Act, 2000

79 Section 67C, IT Act, 2000

80 Section 43A, IT Act, 2000

81 See Section 79, IT Act, 2000

82 https://meity.gov.in/writereaddata/files/GSR314E_10511%281%29_0.pdf

83 Notified under clause (zg) of subsection (2) of section 87 read with sub-section (2) of section 79 of the Information Technology Act, 2000;

84 Rule 3(7) of draft Intermediaries Guidelines (Amendment) Rules, 2018

85 <https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=11244>

86 <https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/86706.pdf>

87 Vide Office Memorandum No.3(6)j2017-CLES dated 31.07.17; https://www.meity.gov.in/writereaddata/files/MeitY_constitution_Expert_Committee_31.07.2017.pdf

88 https://www.sci.gov.in/supremecourt/2012/35071/35071_2012_Judgement_24-Aug-2017.pdf

89 https://meity.gov.in/writereaddata/files/Data_Protection_Committee_Report.pdf

90 https://meity.gov.in/writereaddata/files/Personal_Data_Protection_Bill,2018.pdf

91 http://164.100.47.4/BillsTexts/LSBillTexts/Asintroduced/373_2019_LS_Eng.pdf

92 Preamble, Page 1, Personal Data Protection Bill, 2019 (PDP Bill)

93 Section 4 of PDP Bill

94 Section 5 of PDP Bill

95 Section 6 of PDP Bill

96 Section 7 of PDP Bill

97 Section 17 of PDP Bill

98 Section 19 of PDP Bill

99 Section 20 of PDP Bill

- 100 Section 22 of PDP Bill
- 101 Section 23 of PDP Bill
- 102 Section 27 of PDP Bill
- 103 Section 30 of PDP Bill
- 104 Section 32 of PDP Bill
- 105 Section 33 of PDP Bill
- 106 Section 41 of PDP Bill
- 107 <https://dipp.gov.in/whats-new/draft-national-e-commerce-policy-stakeholder-comments>
- 108 p9, draft NEC Policy.
- 109 p14, draft NEC Policy.
- 110 p14-15, draft NEC Policy.
- 111 See p16-17 of draft NEC Policy.
- 112 p17, draft NEC Policy.
- 113 p19, draft NEC Policy.
- 114 p20, draft NEC Policy.
- 115 Para 3.9 to 3.17, p21-22, draft NEC Policy.
- 116 <https://consumeraffairs.nic.in/sites/default/files/CP%20Act%202019.pdf>
- 117 <https://consumeraffairs.nic.in/draft-rule>

Challenges Associated with the Market Definition Process on E-commerce Platforms: Why Bother with a Market Definition?

Introduction

The most significant element of market power assessment is considered as the market shares of the relevant undertaking. Thus, the assessment of market power usually begins with an effort to define the relevant market accurately. Indeed, an assessment whether (i) a merger or an acquisition leads to significant lessening of competition; (ii) a unilateral conduct of an undertaking amounts an abuse of dominant position; and (iii) an agreement or a concerted practice among undertakings limit the competition in the market, require a market definition as the first step. Intuitively, the market definition process helps to identify the relevant competitors, demand and market shares of the relevant undertakings. Turkish and Indian competition law regimes do not constitute exceptions in this respect as the ‘*relevant market*’ definition is an essential element of the analysis under both jurisdictions in general.

The importance of market definition exercise arises directly from the costs associated with an inaccurate market definition. Whereas a narrow market definition may lead to the existence of substantive market power, a wide definition may lead to the omission of significant market power and thus Type 2 errors. Hence, an erroneous market definition may lead to (i) the prohibition of a pro-competitive merger or an acquisition; (ii) prohibition of a pro-competitive agreement which may increase welfare or (iii) an undertaking to be found dominant in a given market. Due to its importance for the purpose of market power assessment, the process of the market definition requires the utmost delicacy.

This chapter has been contributed by Ebru Ince, Competition Expert, Turkish Competition Authority, and Cihan Dogan, Attorney-at-Law and Ph.D. Candidate at Istanbul Bilgi University, Turkey

In a traditional single-sided market, even though demand substitutability, supply substitutability and potential competition are the three main sources of constraints that undertakings are subject to, demand substitution constitutes the most immediate and effective constraint that an undertaking is subject to as it cannot control the sales conditions in case customers are able to switch easily to a substitute.¹ Thus, the focus in terms of competitive constraints is demand substitutability.

Market Definition in Multi-sided Markets

Multi-sided markets (*=platforms*) can be defined as markets where the platform serves seemingly distinct but connected (via interdependent demand) consumer groups. That is, the demand of the customer on one side of the market is affected by the demand of the customers on the other sides and the platform, which acts as an intermediary internalises these resulting network externalities.²

Therefore, in a multi-market, the agent that internalises the network externalities created by interconnected demands among the different customer groups, is the platform. The platform in multi-market settings thereby could effectively cross-subsidises between different categories of end-users parties to the transaction.³ Similarly, the existence of network externalities provides profit opportunities for the platform by coupling multiple customer groups through multi-product pricing.⁴ So, at the core of the theory of the multi-sided market lies the existence of network effects and multi-product pricing.⁵

The theory of network externalities concerns the inability of a user (*=customer group*) to internalise the effect of his demand on other users (*=demand sources, =customer groups*) either on the same (*=direct network effect*) or on the other side of the market (*=indirect network effect*)⁶. In a traditional single-sided market, a customer's purchase of a good or service is independent of the amount of purchase other individuals make. Yet, when it comes to multi-sided markets, the demands of consumers are interrelated, which means the demand of a user is affected by the demand of the other users and this leads to network externalities. Network externalities could be direct or indirect. Direct network externality is the case where the utility of an individual derives from a purchase, increases with the number of other users making the same purchase. So basically, the value of a service increases with the number of users on the same side (market).

To illustrate, when an individual starts using Skype, Skype users gain a benefit from that usage as the network that they can use Skype is enhanced. This is also the case among the users of Whatsapp. On the other hand, indirect network externalities arise in cases where the utility of a customer

derives from a purchase increases with the number of additional users on the other side of the market. To illustrate, the utility that a consumer in an e-commerce platform derives increases with the number of retailers active in the e-commerce platform. In either case, the externality created by the interrelated demands on or cross sides cannot be internalised by the users but by the platform.⁷

The theory of multi-sided markets has evolved around the concept of indirect network externality since this is the effect that underlies the functioning of multi-markets. Platforms can exploit the profit opportunities created by indirect network externalities, which means they internalize the network externalities. To achieve this, the platforms construct a price structure rather than price levels. That is, the existence of indirect network externalities enables the platform to make a profit by altering the quantity demanded of each side by simply changing its price structure while keeping the sum of the prices (price level) constant.⁸

The pricing strategy is based on price structure lead us to multi-product pricing. So, e-commerce platforms basically do the multi-product pricing as they are serving at least two distinct customer groups (i.e. retailers and consumers). The theory of multi-product pricing is not a new phenomenon as the economics literature is familiar with this concept in the case of for example pricing of a printer and its cartridge. Yet, the difference in e-commerce platform is, whereas the buyer of a printer internalises the price of the cartridge in its purchase decision on the printer, the consumer is not able to internalise the platforms' pricing policy against the retailer on the e-commerce platform. That is, the externality created by one side affects the demand on the other side but cannot be internalised by the side that creates it, rather it is the platform that carries off the internalisation. So, basically, the platform internalises the network externality among the consumer and the retailer. Thereby, as previously mentioned, it is achieved by the platform by choosing a price structure rather than the price level.

Given its structural characteristics, the process of market definition is more challenging for multi-sided markets. Basically, e-commerce platforms include more than one customer group, whose demand structure includes indirect network externalities and none of the customer groups can internalize the indirect network externalities but need the platform for such internalisation. Incorporating these characteristics into the market definition process is quite problematic, burdensome and prone to error.

The Applicability of Traditional Tools to Multi-sided Markets

The issue of whether the traditional tools such as the Critical Loss Analysis (CLA) and Small but Significant Non-Transitory Increase in Price (SSNIP) test would be applicable to the multi-sided markets requires further digging. Both tests basically assess whether a small but significant non-transitory increase in price is profitable and then reveal whether there exists any substitute for consumers to the product whose price is increased. The basic underlying question is whether a price increase is profitable despite the loss in demand.⁹ SSNIP test fails to account for indirect network effect; dual pricing nature of the multi-sided and zero-price markets. These concerns are mostly valid for CLA as well.

The application of the SSNIP test to multi-sided markets is also problematic. *Firstly*, it is not clear whether the SSNIP test will be applied to both sides of the market or if it is necessary to apply a separate test to each side of the market.¹⁰ The most prudent approach is that in cases where a single market is defined, a single SSNIP test could be applied. Hence, the SSNIP test should be applied to the total profit gained from both sides of the market and the network effects should also be accountable for.

Secondly, it is not clear how to allocate the hypothetical price increase among different customer groups.¹¹ This will be more visible in cases where the platform charges both sides of the market. *Thirdly*, it is not clear how to capture the effect of hypothetical price increase over demand for different sides of the market.¹² Whereas a price increase may decrease the demand on one side, it may affect (increase if network externalities are positive or decrease if the network externalities are negative) the demand on the other side.

Fourthly, the application of the SSNIP test to the zero-price side of the market could be also problematic. In this case, perhaps increasing the price from zero to a very negligible amount could be the solution. Yet, for the multi-sided business models funded solely by ads and none of the customer groups are paying; the application of the SSNIP test, which is price centered, could be more problematic. Even though the SSNIP test could be modified so that non-price factors, such as quality or cost replace the price, these models are not free of the multi-sided market complexity either and therefore do not offer a satisfying solution.

How to Define Markets in Multi-sided Markets

The structural characteristics of multi-sided markets render the market definition process more difficult. Yet, certain factors could be decisive in terms of market definition such as whether the indirect network effect

among the customer groups is bilateral or unilateral, or the market is a transaction or non-transaction market; or whether the demand of a customer group can be met by a single-sided competitor as well etc.

Bilateral vs. Unilateral Network Effects

In cases where the indirect network effect is unilateral, which means demand on one side is affected by the demand on the other side but not the other way around, the demand for one side of the market can be met by non-platforms. Thus, in such cases defining two distinct but the related market may be a reasonable approach since in this case the product offered to two sides of the platform is different. To illustrate, for media markets, a different market for readers and a different market for advertisers can be defined. Intuitively, the number of readers does not increase with an increase in the number of advertisers in a newspaper. Clearly, there is no problem with the application of traditional SSNIP and CLA tests to the side of the market that does not have any indirect network effect to another side of the market.

Transaction vs. Non-Transaction Platforms

If the platform can be defined as a non-transaction market, such as newspapers where the readers and advertisers or televisions where viewers and advertisers do not interact directly and the platform charges two customer groups with two different prices as it cannot charge a per-transaction fee, two interrelated markets can be defined.

Yet, the platform can be defined as transaction markets such as payment cards or e-commerce if the transaction is observable by the platform, and a single market can be defined.¹³ In a multi-sided transaction market, the product offered is the opportunity to have a transaction through the platform and this opportunity is created by offering distinct products to more than one customer group in an observable manner.¹⁴

The customer group on one side of the market can consume the product offered by the platform on the condition that the customer on the other side of the platform also consumes the product. For example, whereas the product offered by an online marketplace such as Amazon to retailers is the opportunity to make sales to consumers using Amazon, the product offered by Amazon to consumers is the opportunity to purchase from retailers active in the Amazon marketplace. Since it is not possible to have a transaction through only one side, it is not an option for the platform to have only one side on board.¹⁵ To illustrate, if the customer does not have a credit card valid in a shop, the shop's POS machine is not enough to have a transaction. Similarly, the retailer in Platform A cannot make sales to

the consumers in Platform B through Platform A unless consumers of Platform B are also active in Platform A.

Turkish Competition Board in cases that dealt with transaction platforms such as *Booking*¹⁶ and *Yemek Sepeti*¹⁷ defined a single market. In *Booking*, the Board defined the market as the market for online accommodation booking platforms and in *Yemek Sepeti* (leading online food ordering platform) decision, it defined the market as the market for food ordering platforms. Even though the decisions do not include extensive theoretical explanations, the Turkish Competition Board's approach adopted through both decisions, is in line with the literature on multi-sided markets. It is seen especially in abuse of dominance cases involving online platforms Turkish Competition Board tends to differentiate between online and offline channels and exclude the offline channel from the relevant market.

On the other hand, the Competition Commission of India (CCI), though in earlier cases defined the relevant market including both offline and online channels, off late it has begun to recognise these markets as different. For instance, in cases such as *Snapdeal*,¹⁸ *Mohit Manglani*¹⁹ and *Real Estate*,²⁰ the CCI concluded that online and offline markets are different channels of distribution of the same product, hence they are not two different relevant markets but a single market.

However, in *AIOVA*²¹ it rejected the contention that platforms are mere alternate distribution channels to offline distribution and held “services provided by online marketplace platforms” as a relevant market. The Indian authority continued this line of thought in a very recent case in *FHRAI*²², where it observed that “*in case of platform markets, where the platforms may be serving many sets of consumers and maybe having multitude of relationships with these consumers, the consumer-side for which the relevant market is being defined needs to be identified.*” In this case, ‘market for online intermediation services for booking of hotels in India’ was held as a relevant market.

However, in cases where the platform is a non-transaction platform, there will not be an observable transaction among the sides of the platform. Besides, the competitors could become active only on one side of the market and thus a competitive pressure could be exerted from the one-sided markets. In such a case, a single market for the platform could not be defined.²³ Yet, it should be emphasised that for not all sorts of non-transaction platforms, it is necessary to define two distinct but related markets.

Matching vs. Audience Platforms

The market definition for transaction platforms should include a single market that should not be interpreted as if a single market for non-transaction markets cannot be defined. Indeed, under certain circumstances,

a single market can be defined for non-transaction platforms as well. This would be the case for the non-transaction platforms which provides its customers the opportunity to find a match.²⁴ Dating and social media platforms are the most common example of non-transaction matching platforms. In such cases, the market should be defined as a single platform. Yet, in cases where these platforms are funded through advertisements, the advertisement market should be defined as a distinct market yet related to the platform.²⁵

Turkish Competition Board, through its *Sahibinden* decision (in which the undertaking under investigation is a non-transaction platform), where it evaluated whether *Sahibinden*, dominant online classified ads platform, abused its dominant position through excessive pricing, defined the relevant markets as the markets for (i) online platform services with regards to vehicles sales/rental and (ii) online platform services with regards to real estate sales/rental.²⁶ Bundeskartellamt through a precedent concerning the online dating platforms defined a single market including both user groups that are matched by a dating platform.²⁷

Nevertheless, this approach is not perfectly fit for all the platforms. There are many contradicting views on the categorisation and the proper market definition, which has been surfaced recently with Google cases. Google as a search engine is a matching platform for some,²⁸ whereas constitutes an audience platform for others.²⁹ There are scholars who even argue that Google search engine or search advertising does not constitute a two-sided market due to unilateral network effects and the actual number of transactions taking place.³⁰

Defining different markets for different customer groups could lead to a better understanding of the competitive structure on each side of the market. It would be easier to identify and compare the competitive forces and competitors both in terms of product and geographic scope. Indeed, with such an approach a platform could be found as dominant, but this dominance may not be for each side of the market. Nevertheless, defining different markets may not be reasonable for the transaction markets where different sides are inseparably linked by the platform interaction and therefore are needed in the board for the transaction. Indeed, defining two markets may lead to the ignorance of relevant effects caused by interdependencies, such as indirect network effects between different sides of the platform.³¹

If two markets are defined, the risk is that the analysis will only focus on one of these markets and thus may lead to erroneous findings. In fact, this was the reason why the CJEU annulled the General Courts *Cartes Bancaires* decision.³² Clearly, each approach has its pros and cons, and neither can be labelled as right or wrong in absolute terms as long as the interdependencies are accounted for in the analysis.

The Necessity of a Market Definition: A Search for an Alternative

The question of whether it is necessary to define a relevant market directly concerns the question of whether the market power of an undertaking can be assessed in the absence of a precise market definition as the market definition is, in practice, most needed and used for the market power assessment. When it comes to traditional single-sided markets, market shares are the most significant indicator of the market power assessment. Other than market shares, entry barriers, buyer power could also be considered as other factors.

Yet, since the primary objective and powerful tool for the assessment of market power is market share, authorities tend to mostly rely on market shares to appraise the power of the concerned undertaking. This makes a precise market definition an indispensable part of the market power assessment for the traditional single-sided market. However, for the multi-sided market, there are other factors that can be decisive for the market power assessment. The most important factors in this respect are, including but not limited to, network effects; feedback loops and multi-homing. Thereby, the question is whether it is necessary to have a precise market definition to assess these features of the platform.

The indirect network effect is the key factor that gives rise to multi-sided platforms and therefore could be considered as the most significant entry barrier especially where the market is characterised by large returns to scale and the undertaking has a data advantage. This entry barrier is enhanced or diminished by other factors such as feedback loops and/or multi-homing opportunities. The existence of indirect network effects especially when strengthened by feedback loops and in the absence of multi-homing means higher entry barrier and market power for the incumbent. This is also strengthened by the extreme returns to scale as the cost of production is decreasing by the increase in the number of customers served.³³ Yet, it is not necessary to make a precise market definition to analyse whether there is an indirect network effect among the customer groups of a platform, or the industry is characterised by large returns to scale.

Let us consider the case of e-commerce platforms. An e-commerce platform needs retailers on board to have consumers using the platform. Yet, in order to have retailers, the platform needs consumers on board. In this regard, the *chicken and egg* problem is the problem of the platform to have both sides on board at the same time. Besides, the platform needs to have a scale to be active in the market. Reaching this scale due to indirect network effects is quite difficult and thus network effect can be considered as the most important entry barrier for the multi-sided markets, as it is the creator and lies in the core of this business model.

Nevertheless, it is not necessary to have a precise market definition to reach this conclusion. The network effect concerns directly the different sides (demand sources) of the platform. Thus, in the absence of a precise market definition, authorities can identify whether there are network effects arising from different customer groups of a platform and thus can conclude whether such network effects by taking into account related factors, such as feedback and multi-homing effects grant market power to the platform.

Strong indirect network effects can result in feedback effects between customer groups. This, in turn, can lead the market to be relatively concentrated or perhaps lead markets tipping to one platform.³⁴ Thus, the presence of strong feedback effects is an important indicator of market power. Let us illustrate the feedback effects with an example of an e-commerce platform. In case the e-commerce platform increases the commission rates the platform charges to retailers, the platform will lose some retailers. The amount of loss will depend directly on the demand elasticity. Since the number of retailers decreases due to price increase, this will make the platform less attractive for the consumers due to the decreasing number of retailers active in the platform and thus the platform will probably lose some consumers as well. The decrease in the number of consumers will probably also lead some further loss on retailers as the decreasing number of consumers will make the platform less attractive for the retailers. This will go on and reduce the platform's value for the remaining retailers and consumers. This feedback effects, reduce the market power of the platform for a potential excessive pricing case.

Yet, for a potential predatory pricing case, this may increase the market power of the platform as the multi-sided nature of the platform will enhance the negative effect of potential predatory pricing conduct in the market.³⁵ Since this effect also concerns the customer groups and not the relevant market, in order to analyse this factor, it is not necessary to have a precise market definition. Thus, the assessment of feedback effects, which constitute an important characteristic that can be used to assess the market power, does not require a precise market definition. Even though feedback effects between customer groups (=demand sources) could be used as an important indicator in the market power assessment, the existence of feedback effect, by its own, may not be sufficient to correctly evaluate the market power.

The issue of whether customer groups do have multi-homing opportunities is another important element of the market power assessment for multi-sided platforms. Multi-homing could be for each side of the market as each demand source constitutes a side of the platform. Let us consider an online marketplace. If a consumer does not have the option to multi-home and thus solely use Platform A, then retailers needs to have access to Platform

A to reach that specific customer. Even though Platform A is not the dominant platform, within the meaning of traditional competition law analysis, the lack of multi-homing makes this platform an unavoidable trading partner for retailers which in turn increase the market power of Platform A.

However, multi-homing opportunity will decrease such market power. Besides, even the products which are not considered to be part of the same relevant market can lead to multi-homing and exert competitive pressure which in turn could be considered as a factor diminishing the market power. This pressure may not be significant enough to completely eliminate the market power but in any case may have a negative effect on market power as consumers can, based on the demand elasticity, switch to other alternatives. Let us consider the case for food ordering platforms. These platforms serve two distinct customer groups: restaurants and consumers. Phone orders are considered as distinct market. Yet, when evaluating the market power of a platform the issue of whether restaurants or consumers multi-home plays an important role. Since, in case restaurants receive phone orders or consumers order food by phone, even though this, technically speaking, is not a multi-homing, this could be considered as multi-homing (or an issue providing similar effect as multi-homing) in terms of evaluating the market power. Thus, we believe that the market definition may not be the most essential component for the issue of whether customers multi-home, which is an important indicative factor for the purpose of market power assessment.

Another factor that is quite related to customer groups' multi-homing issue is the degree of dependency of customers to the platform. In cases where a customer is dependent heavily on the platform, this could increase the bargaining power of the platform which, in turn, increases its market power. To illustrate, if a retailer makes most of its sales through a specific online marketplace, this could increase this marketplace's (platform) market power *vis a vis* that retailer.

In such a case, the market share of the given platform would not play a significant role as the platform will become an unavoidable trading partner for this specific retailer. The issue of whether this specific retailer could (or in fact does) multi-home among different platforms or whether the cost of switching among the platforms are also important elements in this regard. In any case, even in the presence of multi-homing and in the absence of high switching costs among different platforms, this dependency would grant the platform a market power at least for a certain period depending on the structural characteristics and switching speed.

Conclusion

For the traditional single-sided market, the most significant indicator of the market power is the market shares of the relevant undertaking. Since this is the only objective and easily accessible data, competition authorities, in practice, tend to rely significantly on market shares. Thus, it is most of the case, necessary to have a precise market definition to calculate the market shares of a given undertaking. Nevertheless, when it comes to multi-sided markets, there are two basic problems.

Firstly, the market definition process for multi-sided markets is quite burdensome due to structural characteristics of multi-sided markets including but not limited to network effects, feedback loops and customer groups' multi-homing. Secondly, measuring market shares in multi-sided markets is challenging as it is, most of the time, unclear how shares should be calculated to take account of the multi-sided nature of the market. Thus, relying solely on the market shares may result in an inaccurate evaluation of the market power.

Both problems associated with the market shares calculation of the multi-sided markets necessitate the consideration of other factors as a proxy for the purpose of market power assessment. In this regard, the economic factors such as network effects, feedback effects and multi-homing could play more significant roles for multi-sided markets. Since these factors do not require a precise market definition, the necessity of defining a relevant product market in the case of multi-sided markets can be questioned as for the economic characteristics of the multi-sided markets makes it easier to evaluate the market power of an undertaking even in the absence of a precise market definition.

In this regard, each demand source (=customer group) can be useful for the evaluation of the market power. The magnitude of a network effect as an entry barrier; or the significance of feedback effects as a means to increase or decrease the market power of the undertaking (based on the conduct in question) or the degree of multi-homing among each side of the platform would reveal quite significant information as per the market power. Besides, if the market share is still found necessary; shares on each demand source (customer groups) can be used as a proxy in the absence of a precise market definition. Therefore, the competition authorities do not necessarily have to define a precise market when such exercise is quite burdensome. Yet, in cases where market definition exercise is not burdensome, a market can, always, be defined.

Endnotes

- 1 (Turkey) Commission Notice on the definition of relevant market for the purposes of Community competition law, para. 13.
- 2 David Evans, “*The Antitrust Economics of Multi-Sided Platform Markets*” Yale Journal on Regulation: Vol. 20: Iss. 2, Article 4, 2003, p. 331.
- 3 Jean-Charles Rochet and Jean Tirole, “*Platform Competition in Two-Sided Markets*”, Journal of European Economic Association, p. 35.
- 4 David Evans, p. 333.
- 5 Jean-Charles Rochet and Jean Tirole, “*Platform Competition in Two-Sided Markets*”, Journal of the European Economic Association 1(4), 2003, p. 993-994 (“*Platform Competition*”); Jean-Charles Rochet and Jean Tirole, “*Two-sided markets: A progress report*”, RAND Journal of Economics, 37(3), 2006, p. 646 (“*A progress report*”).
- 6 Inge Graef, “*Data as Essential Facility Competition and Innovation on Online Platforms*”, KU Leuven, Thesis 2015-2016, p. 30, Access link: <https://core.ac.uk/download/pdf/34662689.pdf> Access Date: 12 January 2019 (“*Data as Essential Facility*”).
- 7 Since the externality is internalized in a multi-market setting by the platform, actually there exists no more externality, therefore the use of network effect network externality is terminologically more proper.
- 8 Jean-Charles Rochet and Jean Tirole, *A progress report*, p. 664.
- 9 Dirk Auer and Nicolas Petit, “*Two-sided markets and the Challenge of Turning Economic Theory into Antitrust Policy*”, s. 26 (“*Two-sided markets*”).
- 10 *Ibid*
- 11 *Ibid*, s. 27.
- 12 *Ibid*, s. 29.
- 13 Lapo Filistrucchi, Damien Geradin and Eric van Damme, “*Identifying two-sided markets*”, World Competition, 36(1), 2013, p. 40-41; Lapo Filistrucchi, Damien Geradin, Eric van Damme and Pauline Affeldt, “*Market definition in two-sided markets: Theory and practice*”, Journal of Competition Law and Economics, 10(2), 2014, p. 293-339; Lapo Filistrucchi, “*Market Definition in multi-sided markets*”, OECD Rethinking Antitrust Tools for Multi-sided platforms 2018, p. 42 (“*Market Definition*”); Sebastian Wismer and Arno Rasek, “*Market definition in multi-sided markets*”, OECD Rethinking Antitrust Tools for Multi-sided platforms 2018, p. 57 (“*Market Definition*”).
- 14 Sebastian Wismer and Arno Rasek, “*Market definition*”, p. 60.
- 15 Lapo Filistrucchi, Damien Geradin, Eric van Damme and Pauline Affeldt, p. 301-302; Sebastian Wismer and Arno Rasek, “*Market definition*”, p. 57. This is the case for e-commerce platforms. Inge Graef, “*Data as Essential Facility*”, p. 91.
- 16 Turkish Competition Board’s *Booking* decision dated 05.01.2017 and numbered 17-01/12-4.

- 17 Turkish Competition Board's *Yemek Sepeti* decision, dated 09.06.2016 and numbered 16-20/347-156.
- 18 Competition Commission of India, Case No. 17 of 2014.
- 19 Competition Commission of India, Case No. 80 of 2014.
- 20 Competition Commission of India, Case No. 23 of 2016.
- 21 Competition Commission of India, Case No. 20 of 2018.
- 22 Case No. 14 of 2019
- 23 Sebastian Wismer ve Arno Rasek, "*Market Definition*", p. 58.
- 24 *Ibid*
- 25 *Ibid*
- 26 Turkish Competition Board's *Sahibinden* decision, dated 01.10.2018 and numbered 18-36/584-285.
- 27 Bundeskartellamt, *Parship/Elitepartner* (Case B6-57/15), 22 October 2015, paras 71-79. Sebastian Wismer ve Arno Rasek, "*Market Definition*", p. 58.
- 28 Commission Decision (EC) No. COMP/M.5727 of 18 Feb. 2010, §47, 2010 O.J. (C 2010) 1077.
- 29 Martin Cave and Howard Williams Paper, "*Google and European Competition Law*", Presented at the 2011 TPRC Research Conference on Communication, Information and Internet Policy (Sept. 25, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1992974.
- 30 Giacomo Luchetta, "Is the Google Platform a Two-Sided Market?", *Journal of Competition Law & Economics*, 10(1), 185–207
- 31 Sebastian Wismer ve Arno Rasek, "*Market Definition*", p. 57.
- 32 Daniel Mandrescu, "*Tales of two-sided markets, market definitions and anti-competitive effects – insights from Ohio v. American Express*", 17 July 2018, Core Blog, available at: <https://coreblog.lexxion.eu/tales-of-two-sided-markets-market-definitions-and-anti-competitive-effects-insights-from-ohio-v-amex/>.
- 33 Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, "*Competition Policy for the digital era*", European Commission, 2019, p. 19 ff.
- 34 Kate Collyer, Hugh Mullan and Natalie Timan, "*Measuring Market Power in Multi-Sided Markets*", *Competition Policy International Antitrust Chronicle*, September (3), 2017, p. 46. Available at: https://www.competitionpolicyinternational.com/wp-content/uploads/2017/09/AC_September.pdf.
- 35 Turkish Competition Board's *Çiçek Sepeti* decision dated 08.03.2018 and numbered 18-07/111-58.

Regulatory Framework for the National AI Marketplace

Introduction

Artificial Intelligence (AI) has come a long way since the term was coined by Professor John McCarthy at the famous Dartmouth conference in 1956. Ardent work by scientists and engineers, combined with unprecedented technological evolution, has started spawning many applications of practical importance. The objective of AI is to identify problems and then create an appropriate algorithm to solve them. AI keeps learning from big data, as raw material, for decision-making. However, there has been a large debate around the ethical harvesting, processing and utilisation of big data, which has been extended to AI as well.

The aim of AI is to model human behaviour and develop cognitive beings that can take decisions of their own. To emulate human behaviour, AI algorithms learn from human experiences. Hence, the experiences that AI machines learn to play an integral role in determining their behaviour. There are various areas of AI which are outlined in the following Table.

Human experiences can be varied and biased. Learning from these experiences can result in AI applications that can be biased, discriminatory or unethical. Biases that exist in the data will be propagated during the learning process, and might also be amplified by the learning algorithms. Fortunately, as engineers of these AI machines, we have the power and control to orchestrate the development of AI machines. In this context, both sanitisation of the input data and the development of robust machine learning algorithms that do not propagate bias are both equally commensurate in redressing the problem.

This chapter has been contributed by V. Sridhar, Professor, International Institute of Information Technology, Bangalore, and Kotta Hari Chandana, Software Developer, Intuit

Table 8.1: Different Areas of AI		
Areas of AI	Description	Example Application Areas
Computer Vision	Method for understanding how to make intelligent decisions about an environment, on the basis of sensory inputs.	Automation of visual inspection of defects in shop floors; automated target recognition for autonomous vehicles and weapon systems; photo interpretations and associations; lip and emotion reading in interviews.
Machine and Deep Learning	Deep learning is a machine learning technique that teaches computers to do what comes naturally to humans and that is learning by example. Deep learning allows computational models that are composed of multiple processing layers to learn representations of data with multiple levels of abstraction.	Object detection in autonomous cars; drug discovery and genomics; natural language understanding.
Natural Language Processing	Automatic recognition and manipulation of language input in the form of text, audio.	Information retrieval and processing; spelling and grammar corrections; machine translation; automatic parsing and content analysis; text mining.
Neural Networks	Modelled to process information similar to how our brain does through an interconnected network of nodes (referred to as neurons). Typically, Neural Networks learn by examples. Recent advances include brain-inspired computing that goes beyond the sensory perceptions of brain trending towards modelling the short and long-time memory of our brain.	Context and experience-dependent information processing in augmenting learning methods; static and dynamic feature extractions and classification in vision processing.
Pattern Recognition	In deep learning, a computer model learns to perform classification tasks directly from images, text, or sound. Deep learning models can achieve state-of-the-art	Stock market forecasting and algorithmic trading; sentiment analysis of social network feeds; detecting marketing clusters for algorithmic pricing; picture segmentation and

Contd...

Areas of AI	Description	Example Application Areas
	accuracy, sometimes exceeding human-level performance. Models are trained by using a large set of labelled data and neural network architectures that contain many layers.	clustering in social media photo-sharing platforms.
Robotics	Robotics is an interdisciplinary branch of engineering and science that includes mechanical engineering, electronic engineering, information engineering, computer science, and others. Robotics deals with the design, construction, operation, and use of robots, as well as computer systems for their control, sensory feedback, and information processing. Recent advances in Autonomous Robot that performs tasks in unstructured environment; Assistive Robots that provide assistance to people through physical contact (contact assistive robotics), and to robots that entertain through social interaction (social interactive robotics) (Feil- Seifer, 2005) and Soft Robots that are machines made of soft – often elastomeric – materials.	In manufacturing, process industries, medical and healthcare, entertainment, public services.
Speech Recognition	These technologies are used to develop machines that can substitute for humans and replicate human actions.	Speech recognition and generation are sometimes helpful for environments that are hands-busy, eyes-busy, mobility-required, or hostile and show promise for telephone-based services; conversational robots and chatbots.

Source: Sridhar (2019).

Algorithmic bias and ethics can be serious issues, especially in cases where data points represent real humans. Many AI algorithms are not explainable, meaning that no one, including the users or even the designers of such algorithms, knows exactly how they produce a particular result (Rao & Chatterjee, 2018).

Fundamental research in artificial intelligence is based on mathematics and logic. Until recently, fundamental research in this field has been carried out in isolation with concerns of privacy, ethics, safety and regulatory implications which governs mostly with the applications of the research. Ideally, learning algorithms must be robust enough to identify and eliminate learning from any biases in the data. Recent efforts by pioneers such as OpenAI have identified the importance of developing algorithms that can eliminate biases from training datasets, more traceable and scalable (OpenAI, 2019). However, we are a long way from achieving the ideal state where algorithms learn only from righteous experiences when fed with a mix of rich and varying human experiences. The other way to deal with this problem is to sanitize the data fed to these algorithms.

Be that as it may, the National Institution for Transforming India (NITI Aayog) in its discussion paper on AI has proposed the development of a National AI Marketplace (NAIM) to be created in India for encouraging the use of AI artefacts in select sectors such as healthcare, education and agriculture. In this chapter, the architecture of such a marketplace is deliberated. We also develop possible guidelines for the platform to be sustainable, trustworthy, scalable, immutable, secure and accurate. We also provide indicative policy and regulatory framework for addressing privacy, security, ethics and quality of data in the platform.

Government Initiatives on AI

The Ministry of Commerce and Industry in India set up an AI Task Force which acknowledges the creation of a policy and legal framework to accelerate deployment of AI technologies across domains as an important goal. It rightly emphasizes that AI should be interpreted as a scalable problem solver, rather than merely a booster of economic growth.

NITI Aayog released a discussion paper regarding the National Strategy for AI in India in June 2018. Recognising AI's potential to transform economies and the need for India to strategise its approach, NITI Aayog was mandated to establish the National Program on AI, with a view to guiding the research and development in new and emerging technologies (NA, 2018). In pursuance of the above, NITI Aayog has adopted a three-pronged approach – undertaking exploratory proof-of-concept AI projects in various areas, crafting a national strategy for building a vibrant AI ecosystem

in India and collaborating with various experts and stakeholders. The discussion in the paper revolves around recognising the need to be early adopters in AI in the world, and focus on identifying areas of application of AI in sectors like healthcare, agriculture, education, smart cities and infrastructure, and mobility and transportation. The paper also emphasises inculcating the best practices from other economies, and collaborating with the private sector to develop solutions that are accessible, scalable and economic under the banner of “#AIFORALL”.

The United States released an executive order recently on promoting American leadership in the area of AI (White House, 2019). The main aspects of this order include (i) promoting research and development and innovation in AI (ii) developing standards for ethical and safe behaviour of AI systems (iii) imparting skills to American workforce to embrace AI in their workplace and (iv) promote and open up markets for the use and adoption of AI products and services being developed in the US. One of the important aspects of this order is to improve the quality and accessibility of federal data for AI Research & Development and testing. Besides, the European Commission has recently released guidelines for Ethical AI, in which the three principles of (i) ethics (ii) lawfulness, and (iii) robustness are emphasised (EU, 2019). The EU guidelines advocate the principles of (i) respect for human autonomy (ii) prevention of harm (iii) fairness and (iv) explicability as the underlying core requirements for preserving the ethics of AI.

The Institute of Electrical and Electronics Engineers (IEEE) has initiated the ethical design of intelligent and autonomous systems, as part of the IEEE Global Initiative, for the development of the IEEE P7000 series of standardisation and certification process of such systems (IEEE, 2019). The principle aim of this initiative is to mitigate the negative impacts and misuse of AI systems to promote accountable and transparent systems for the benefit of humankind and the environment. Below are the design principles that are being advocated for building AI systems:

1. How can we ensure that AI does not infringe upon human rights?
2. How can we design AI systems that promote human well-being?
3. How can we make sure that designers, manufacturers and service providers of AI systems act responsibly and are made accountable for the behaviours of the systems they build?
4. How can we ensure that AI systems are transparent?
5. How can we extend the benefits and reduce risks of misuse of AI systems?

National AI Marketplace

The Indian Government has taken a progressive approach towards the adoption of AI, realising well that the data, in an easily accessible format, is scarce in India. To this end, the NA (2018) suggested the creation of a marketplace model to promote the adoption of AI by startups, the private sector, and the Government. The AI marketplace will facilitate several types of data collected from various sources including documents, images and videos; a method for labelling such collected data (aka “annotation”) for recognition of the context, subjects and environment by algorithms; and a framework for building different models that use the annotated data to learn, analyse and predict certain events or outcomes. Such a platform will be a major accelerator for the adoption of AI in India by becoming a one-stop solution for all data needs, starting from research and experimentation to building applications as well as sharing of deployable models, results and applications via open-sourcing or commercialisation of these applications.

While the paper does not mention any specifics with regard to sharing mechanisms of research output, open-sourcing can develop a rich network of free sharing that can accelerate research, and commercialisation can lead to making this whole organisation a self-sufficient body to run while attracting private industries and startups to contribute.

Following is a schematic diagram of all stakeholders that are possibly involved in NAIM:

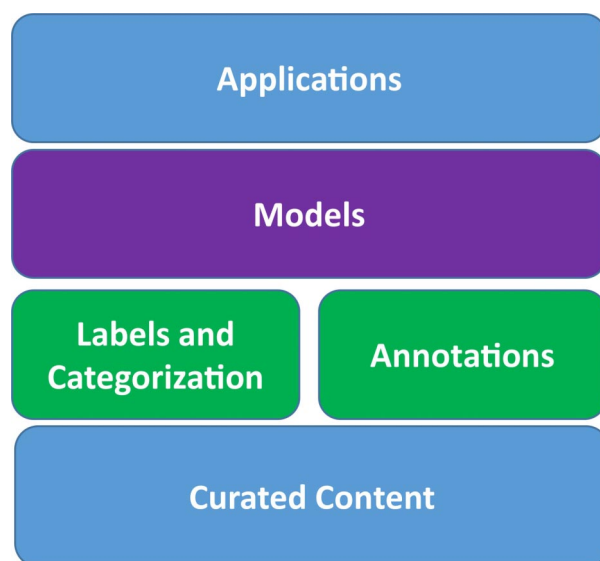
Figure 8.1: Schematics of National AI Marketplace



As discussed in the previous section, content creators generate data; annotators label them for identification; model builders build different types of models that use annotated data for predicting certain outcomes, and finally, the content users use the annotated data and associated models for their own objectives.

The NAIM guidelines briefly specify the different stages of its evolution, including the creation of content, curation and scrubbing of content, labelling and annotation of the same and building different models. The technical architecture of the NAIM stack is given in Figure 8.2:

Figure 8.2: Technical Architecture of NAIM



The users build applications that use the annotated data and a set of models in the market place for meeting their objectives. The platform enables the use of marketplace artefacts through open interfaces.

Characteristics of NAIM

With data being the fuel to create AI systems, coming from a database that is used by various stakeholders, data biases could lead to unethical, biased or corrupt systems, rendering the use of this marketplace impractical. Hence, it is necessary to have a regulatory framework around various aspects such as the addition of new datasets to this platform, usage of data from this platform, and protection of these datasets. These regulatory aspects are the primary focus of this paper.

The aspects for developing regulatory guidelines of the NAIM are proposed in Figure 8.3:

Figure 8.3: Characteristics of NAIM

NAIM	Multi-sided market	Cross-Side Network Effects Money and Subsidy Sides Competition and Antitrust
	FAIR	Findable Accessible Interoperable Reusable
	Trustworthy	Technically Robust Privacy Protective Diverse Non-Discriminatory & Fair Societal well being Explicable, Transparent, Accountable and Traceable Human Oversight & Auditable
	Legal	Comply to Legal and Regulatory Requirements

NAIM as a Multi-Sided Market

The NAIM can be conceptualised as a Multi-Sided Market Place (MSMP). The multi-sided market place is an extension of Two-Sided Markets (2SM) and associated Platforms (P) that form the basis of operation of most of these digital firms. In a typical 2SM, there are two sets of users who complement each other's usage, thereby increasing the network effect for enhanced value for both (Rochet & Tirole, 2003).

Typical examples include an e-commerce portal that connects users on the one side with suppliers of goods on the other side; a travel portal that intermediates between travellers on the one side and the travel firms on the other; and so on. Often, one side of users cannot exist without another and a platform is possibly the most efficient way for them to interact with each other and transact commercially. In the context of NAIM, the different stakeholders, as given in Figure 8.1, form the basis of its multi-sidedness.

The theory of MSMP and associated platforms is not new. It has been in existence since the time Visa and MasterCard were discovered and even prior to that. We describe below some of the important characteristics of such MSMPs.

Cross-Side Network Effects

“Network externalities” are qualities of certain goods and services such that they become more valuable to a user as the number of users increases. Examples of products exhibiting network externalities include fax machines, credit card networks, telephone services, broadcast industry services, computer hardware and software (Sridhar, 2012). Hence, network externality is defined as the increasing utility that a user derives from consumption of a product or a service as the number of other users who consume the same product or service increases. Due to these externalities, the network effects can be direct or indirect, fuelled by complementarity and compatibility of associated products and services.

In a typical MSMP, there are multiple sets of users who complement each other's usage, thereby increasing the network effect for enhanced value for both. The platform enables these heterogeneous sets of users to come together to conduct commercial transactions. The success of the platform depends on the number of users on each side and the usage across them which is often referred to as ‘cross-side network effect’ (Sridhar, 2016). Hence, in an MSMP, the cross-side network effects typically complement the same-side network effects – direct, indirect, or both (for details, refer to Sridhar (2019).

In NAIM, content creators create and post their content in NAIM; the annotators annotate the same; model builders develop various models to use annotated content for use in specific use cases; and the final retail and enterprise users use it for research and other business requirements. In this market place, each stakeholder gets to benefit from others, thereby deriving cross-side network benefits. For example, the annotators benefit from large generated content; model builders can test and verify with a large set of annotated content; and finally, users can consume what they need if the repository is large. Cyclically, the more users use the content from NAIM, there is a higher incentive for content creators to create, label and upload content in NAIM.

Pricing in NAIM

Pricing is one of the important strategies in an MSMP. Typically, a subset of users is subsidised – also called as the ‘subsidy side’, while the other subset pays a premium, depending on the price elasticity of the demand (also called as ‘money side’). In an MSMP with positive cross-side network effects, the platform provider, even if it is a monopolist, has an incentive to reduce platform profit. This is because, in order to compete effectively on some sides of the market, a platform needs to compete well on the other sides as well. This creates a downward pressure on the prices offered to both sides compared to the case where no cross-side effects exist (Prasad &

Sridhar, 2014). Through detailed analysis is needed, the content creators, annotators and model builders that have low price elasticities are on the subsidy side; however, content users pay a premium for the annotated content and models. The NAIM operator, after accounting for charges for its operations, can distribute charges for development of content, annotation and model building.

Competitive Effects

The prospect of increasing returns to scale in network industries, especially in MSMP, can lead to winner-take-all battles, and hence, if not monopoly, but a relatively fewer number of platform providers. So, an aspiring platform provider must consider whether to share its platform with rivals or fight to the death (Eisenmann, et al., 2006). It is possible for NAIM platforms to be replicated in some form even by private entities. In such a case, it is to be decided whether NAIM will be shared with the competitors using certain usage agreements.

FAIR Usage Principles

Our proposed framework is broadly divided into multiple modules of compliance. All the data produced in a scientific manner must adhere to minimum standards across all these divisions, namely: (i) the FAIR principles; (ii) Trustworthy guidelines; and (iii) legal requirements. Any dataset that qualifies in the above three divisions can be potentially considered for possible publication in the National AI Marketplace.

In this section, we will discuss and establish FAIR principles for NAIM and also any potential solutions inspired by other nations to enforce these principles. FAIR stands for Findable, Accessible, Interoperable, and Re-usable principles as given in Wilkinson, et al. (2016). FAIR principles have now become guiding principles for many institutions across the world such as the Association of European Research Libraries, and leading research Institutes in India for easy access to research data and information. It has also led to the development of the GO-FAIR initiative whose vision is to improve the infrastructure supporting the reuse of scholarly data.

Findable

Any data and corresponding metadata that is entered into the National AI Marketplace must be uniquely identifiable. One should be able to uniquely refer to any data on the platform via a persistent and immutable identifier. A good example of this is the 'Digital Object Identifier (DOI) system', and a 'handle system' used by the Australian National Data Service (ANDS, 2019). DOI is an outcome of the International DOI Foundation, (IDF), a non-profit organisation based in Australia. DOI and handle are a potential

solution to the problem of making data findable. A similar platform exists in the Netherlands called DANS - Data Archiving and Network Services which is used by the institutes in the Netherlands to access digital research resources. This provides services that allow storing and sharing of data during research, and also services to archive and share research output. An interesting aspect of DANS is that they allow storing and sharing of data during the research phase as well. This is very crucial for researchers who work in collaboration with each other.

To this end, NAIM could provide personal space within the cloud via a web platform. Independent researchers, as well as institutions, could be given access to this platform. Members of the platform can share research data and outputs within their personal cloud space, and request to make the output publicly available. After the dataset is validated against certain metrics and classified as 'fit for public consumption', NAIM could allow certain organisations to act as registration agencies who issue unique identifiers for datasets entering NAIM after evaluation. This is when an identifier is attached to a dataset and enters a public cloud space where it is findable by anyone accessing this platform. By making each data resource uniquely identifiable and available in a publicly accessible cloud storage system, persistent archiving can be achieved and archived data can be uniquely referenced by DOI. Also, it serves the higher goal of making research re-usable.

Accessible

A platform such as NAIM must be accessible to everyone using the platform, with minimal barriers to entry. According to the original definition of accessibility from the FAIR principles, data are accessible by their identifier via a common communications protocol [9]. In the context of a vast nation with a variety of people accessing the platform, we modify this definition to include minimal barriers to entry and non-discriminatory access to the dataset. We could also include access control mechanisms to disallow malicious users' access to this platform.

To this end, authentication and authorisation of users via standard protocol also must be in place. e-Pramaan is the standard framework proposed by the Government of India that outlines the framework used for e-Authentication for offering any public services and includes services like Aadhaar based authentication, Identity Management, e-Authentication and authorisation, single sign-on and deregistration amongst others. This would ensure a one-time verification to avoid malicious users and also ensure minimum barriers to entry and non-discriminatory access to the platform, irrespective of the demographics of the person accessing the platform.

The original definition of accessibility in the FAIR principles governs the communications protocol involved in accessing this dataset. A comprehensive cloud platform using standardised network protocols, infrastructure, security and recovery mechanisms could be one way to make NAIM truly accessible. Using a cloud strategy also has the advantage of ensuring the resiliency of the platform by having backups and recovery systems in place. In addition to this, the platform must be robust to network attacks from hackers/malicious users so that downtime is minimised.

Another aspect governing accessibility is access to a dataset once it is removed from the platform at a later stage. The corresponding metadata must be available still. This mechanism can be inculcated using the unique identifying mechanism built or used by the NAIM. The unique identifier used by the deleted resources will stay persistent with a handle to metadata and will not be re-used for another resource.

Interoperable

The interoperability of data is enabled through *data standardisation*. This involves bringing data into a common format to facilitate collaborative research, large-scale analytics, and the sharing of sophisticated tools and methodologies. One way is to develop a data model that could help in structuring the data and metadata according to agreed models and schemes and to codify data using standard classifications and vocabularies.

Our recommendation is based on [12]. We can then enforce adherence to the data model proposed by NAIM. In its simplest form, the interoperability model could have identifiers that should be attached to data. The identifiers could be tags such as the type of data indicating whether the data is structured or unstructured, tags regarding the domain of the dataset; for example, healthcare, agriculture, etc. These identifiers or tags could also help us semantically group and separate datasets. Given the amount of data that could enter into such a public marketplace, the creation of a data model can help ensure data interoperability, semantically group data and make the data more manageable.

Reusable

The last FAIR principle talks about the reusability of data. The research community must be able to re-use data and replicate the results of algorithms in different environments. Following the above principles and recommendations above to use a cloud strategy, using data standardisation techniques and an accessible cloud strategy with minimum barriers to entry, reusability can be achieved to a large extent. In addition to this, the original documentation of the FAIR principles recommends that metadata have a plurality of accurate relevant labels and attributes. Also, data must

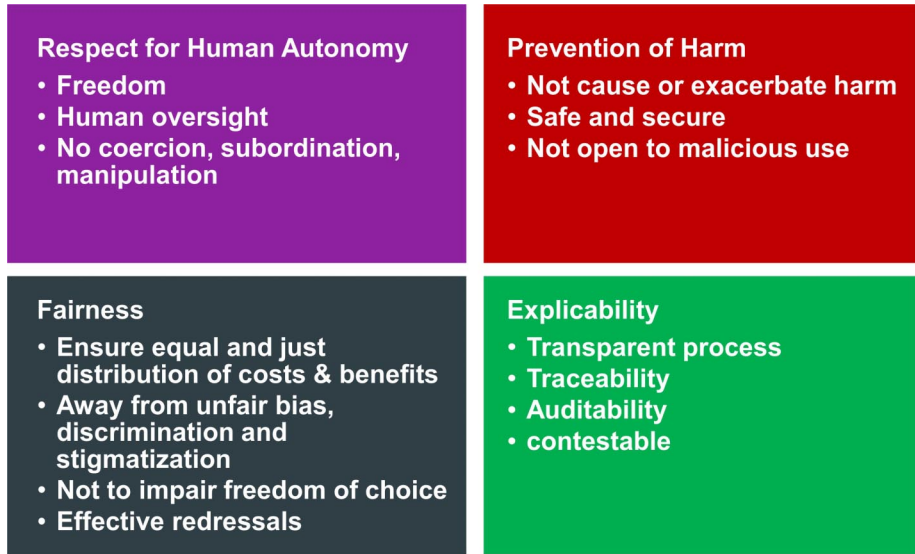
be released with a clear and accessible data usage license. To this end, the use of machine-readable licences can help in ensuring reusability. As put together by a creative common organisation, a machine-readable licence is a machine-readable translation of the licence that helps search engines and other applications identify your work by its terms of use. We recommend the usage of a creative commons licence that lays minimum restriction on data use (CC, 2019).

Trustworthy Guidelines

The NAIM should be “trustworthy” from the viewpoints of all stakeholders. We borrow heavily from the trustworthy guidelines of AI and autonomous systems as promulgated by the EU (2019).

The four basic principles presented in the EU (2019) regarding the trustworthiness of an autonomous system are depicted in Figure 8.4.

Figure 8.4: Key Principles of Trustworthy AI and Autonomous Systems



Technical Robustness

The NAIM should be technically robust, and resilient against malware and cybersecurity threats. Any breach or leakage due to lack of security might lead to associated issues such as privacy violations or systems dis-function. The contents, labels, annotations and models stored in NAIM should be vulnerability proof so that malicious actors cannot use them for harmful purposes. Further, enough precautions should be taken to have backups of

NAIM so that there are redundancies in case of any possible failures. There should be controls in place to make sure that the NAIM artefacts are compliant with high levels of accuracy. Reproducibility describes whether an AI experiment exhibits the same behaviour when repeated under the same conditions and NAIM should enable the same. This enables scientists and policymakers to accurately describe what AI systems do.

Privacy Protective

The NAIM shall protect the privacy of individuals including all the stakeholders of the market place as well as personally identifiable information (PII) of individuals and societies in the original content. Solove (2006) provides a comprehensive privacy framework consisting of about 16 attributes that need to be appropriately incorporated in NAIM regulation. For example, the regulations should make sure that PII is protected; sensitive PII is collected at a minimum and shall be made anonymous; content from NAIM shall be used only for purposes for which it is collected; the content shall adhere to consent adherence, and so on. The NAIM architecture should be privacy-preserving and protecting the identity of individuals using secure principles.

Diverse, Non-discriminatory and Fair

The data and models in NAIM should not be biased towards certain sections of the society, caste or creed. Identifiable and discriminatory bias should be removed in the collection phase where possible. The policies and regulations should encourage a diverse set of artefacts that are representative of all sections of the society, cultures and disciplines shall be captured, annotated and used. There should be mechanisms in place to remove any algorithmic and data biases throughout the life cycle of NAIM.

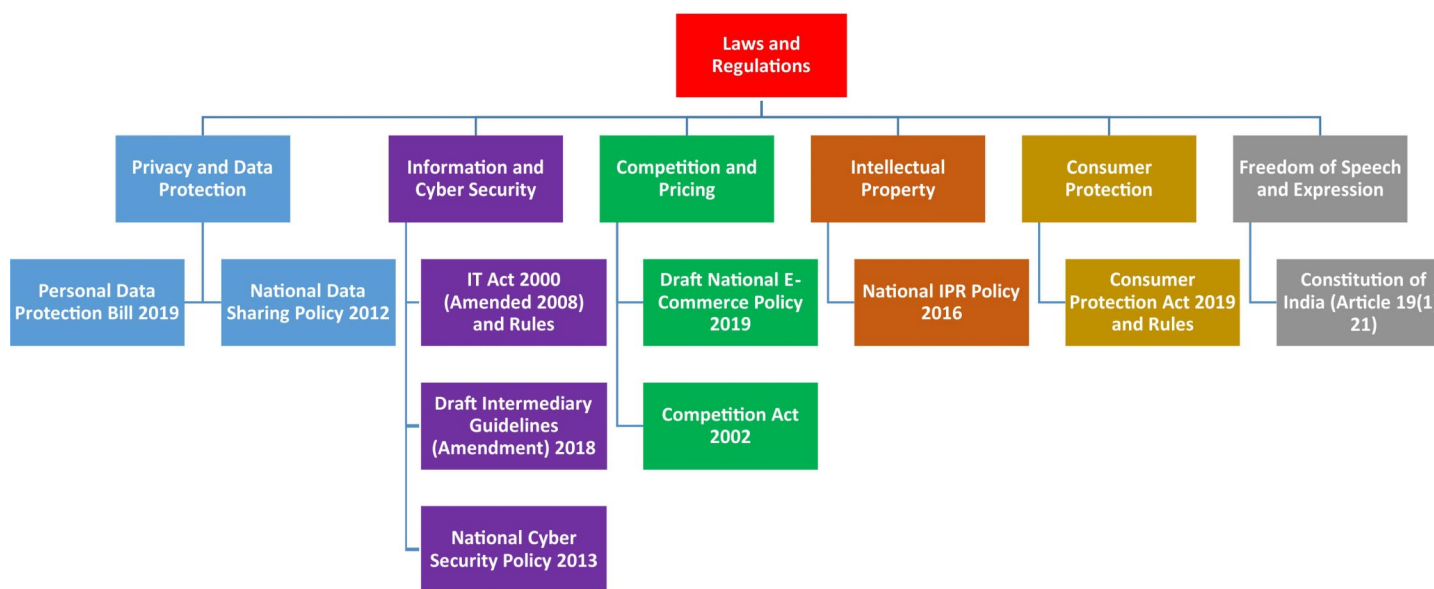
Societal Well-being

The NAIM artefacts should be used to enhance social interactions, skills and wellbeing. Negative effects that can potentially have debilitating effects should be curbed and monitored. The NAIM shall enhance the democratic process, including political decision-making. It should encourage the development of socially relevant applications and must be designed to prohibit any socially deprecating and devising uses. The model should promote social harmony and wellbeing of all. Any violations of this should be immediately detected and removed.

Explicable, Transparent and Accountable

The annotations and models built and made accessible through NAIM should be explainable. The chain of causation should be traceable across artefacts. The process of annotations, model schema, design choices,

Figure 8.5: Indicative List of Legal and Regulations for Compliance



annotations, and algorithms should be transparent so that there are no hidden deficiencies. Further, the artefacts of NAIM should be clearly documented to allow complete traceability. The accountability for the functioning and performance of the NAIM artefacts should be unambiguously defined.

Human Oversight and Auditability

Human oversight helps to ensure that an AI system built over NAIM does not undermine human autonomy or causes other adverse effects. Oversight may be achieved through governance mechanisms such as a human-in-the-loop (HITL), human-on-the-loop (HOTL), or human-in-command (HIC) approach (refer to EU (2019) for details). The NAIM artefacts should be auditable. As indicated in FTC (2019), it should be mandatory for NAIM platform provider as well as other stakeholders to conduct a periodic audit of artefacts and algorithms for their appropriate behaviour, trustworthiness and data protection.

Legal Compliance

The NAIM should adhere and conform to all the legal requirements of the state including data protection, privacy, national security, law enforcement, freedom of speech, human autonomy and cybersecurity. The legal compliance should also be transitioned to users who build applications using the NAIM artefacts for different purposes. The Figure 8.5 provides an indicative list of laws and regulations that we have in the country that NAIM should be compliant with.

Conclusion

Artificial Intelligence and associated technologies are evolving into a double-edged sword. They have a number of positive effects, including the possibility to deliver an additional economic output of about \$13 trillion per year (Cheatham, et al., 2019). However, they are also prone to undesirable and unintended negative consequences such as privacy violations, discrimination, accidents, and manipulation of political systems.

The NAIM is an evolutionary concept mooted on NA (2018) that can nurture developments of AI systems in the areas of healthcare, education, agriculture, to name a few. The perennial data adequacy problems in developing countries such as India will be mitigated by developing a sustainable, high quality

annotated content market place as has been proposed in NA (2018). In this paper, we propose the following:

1. Develop the ecosystem of content developers, annotators and model builders to develop artefacts that can be tested for:
 - a. Trustworthiness and ethical behaviour; and
 - b. Meeting the regulatory and legal requirements with respect to privacy, data protection, law enforcement and consumer protection.
2. Build a monetisation mechanism that can keep the NAIM growing both in terms of the artefacts as well as usage, thereby providing sustainability;
3. Possibly share some of the NAIM infrastructures including the artefacts to other competing platform providers including private entities for widespread adoption and usage.

References

- Australian National Data Service (ANDS). (2019). Digital Object Identifier (DOI) system for research data. Available at: <https://www.ands.org.au/guides/doi> accessed on 28 Apr 2019.
- Cheatham, B., Javanmardian, K., and Samandari, H. (April 2019). Confronting the risks of Artificial Intelligence. *McKinsey Quarterly*.
- Creative Commons (CC). (2019). Creative Commons License. Available at: <https://creativecommons.org/choose/> accessed on 28 Apr 2019.
- Eisenmann, T., Parker, G., and Van Alstyne, M.W. (2006). Strategies for Two- Sided Markets. *Harvard Business Review*.
- European Commission (EU). (2019). Ethics guidelines for trustworthy AI. Available at: <https://ec.europa.eu/futurium/en/ai-alliance-consultation/guidelines#Top> accessed on 19 Apr 2019.
- Federal Trade Commission (FTC). (2019). Algorithmic Accountability Act of 2019. United States of America.
- IEEE. (2019). The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. Ethically Aligned Design: A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems, Version 2. IEEE, 2017. Available at: http://standards.ieee.org/develop/indconn/ec/autonomous_systems.html accessed on 19 Apr 2019.
- NITI Aayog (NI), GoI. (2018). National Strategy for Artificial Intelligence.
- Open AI. (2019). Discovering and enacting the path to safe artificial intelligence. Available at: <https://openai.com/> accessed on 28 Apr 2019.
- Rao, S. and Chatterjee. D. (2018). Artificial intelligence policy: Need aggressive development with prudent regulation. *Current Science*. 115(6), 1015-1016.
- Sridhar, V. (2012). *Telecom Revolution in India: Technology, Regulation and Policy*. New Delhi, India: Oxford University Press, ISBN-13: 978-0-19-807553-0; ISBN-10: 0-19-807553-7.
- Sridhar, V. (2016). Two-Sided Markets, Platforms and their impact on Economy. In (Ed. CUTS International). *Pursuing Competition and Regulatory Reforms for Achieving Sustainable Development Goals*. 253-278.
- Sridhar, V. (2019). *Emerging ICT Policies and Regulations: Roadmap to Digital Economies* (manuscript in preparation). Springer Nature.
- White House, U.S. (2019) Executive order on maintaining American leadership in Artificial Intelligence.
- Wilkinson, D., et al. (2016). The FAIR Guiding Principles for scientific data management and stewardship. *SCIENTIFIC DATA* | 3:160018 | DOI: 10.1038/sdata.2016.18.

Relevant Market and Market Power in Ride Sharing Industry

Introduction

The tremendous technological advancement at global as well as the national level has led to an influx of companies offering digital services in various sectors posing challenges to traditional markets. One such industry is the Indian Taxi Market. In recent years, India's taxi market dynamics have changed with the entry of Ola and Uber in 2011 and 2013 respectively. Before the entry of OLA, there were a few big radio taxi service providers like MERU Cabs, Mega Cabs, Easy Cabs and Tab Cabs, along with many small local taxi service providers all across India. These players owned their own radio taxis and operated under the 'asset-owned business model',¹ also known as 'the traditional model'. OLA and Uber emerged as ride-sharing platforms operating under a new business model – 'the aggregator model'.²

Unlike the traditional taxi service providers, these aggregators do not necessarily own the taxis (at least, not the entire fleet). They provide a technology-driven platform that matches drivers willing to offer ride service and riders that are looking to avail ride to travel from one spot to the other. This is a real-time, on-demand service. Due to the cost-effective, time saving and hassle-free transportation services, the taxi aggregators gained huge popularity among the consumers in the metro cities. At a nascent stage, these ride-sharing platforms experienced a huge demand and high growth.³

With the growth in demand for OLA and Uber, the demand for traditional taxi services was allegedly affected. As a result, multiple complaints were filed with the Competition Commission of India (CCI) alleging OLA and Uber of carrying out anti-competitive practices like predatory pricing, surge pricing, exclusive agreements with the drivers. Until now, the CCI has dealt with as many as 10 cases of abuse of dominance by OLA/Uber in various cities.⁴

This chapter has been contributed by Garima Sodhi, Senior Fellow, and Rinki Singh, Research Associate, CUTS Institute for Regulation & Competition

However, these ride-sharing platforms have distinct characteristics that challenged the authorities across the globe in defining the relevant market and assessing market power under the law not so well equipped to deal with these new age markets. The conventional techniques, which consider the price levels (like SSNIP Test, learner's Index, Herfindahl-Hirschman index (HII) etc.) for determining the relevant market and assessing the market power are not applicable to multi-sided markets. In this paper, the authors describe the ride-sharing industry ecosystem and suggest an approach for defining the relevant market and assessing the market power using the traditional tools adapted to new markets until new tools are developed for such markets.

Ride Sharing Service

There have been some definitional conflicts on the term “ridesharing”. Sharing economy, as defined by Frenken et al. (2015),⁵ is “consumers granting each other temporary access to under-utilised physical assets (“idle capacity”), possibly for money.” Frenken et al. (2017) discuss that in case of a taxi service, when a consumer books a taxi, it creates a new capacity to drive from one point to the other. The trip is made on-demand and the term now coming into common use for this is the on-demand economy.

On the other hand, in hitchhiking/carpooling service, the trip is already planned from one point to the other and the consumer is booking the unused seat on that trip. Going by the use, hitchhiking and carpooling are examples of ride-sharing and part of the sharing economy (Benkler, 2004).⁶

Earlier, platforms like Uber, Lyft and Didi were called ride-sharing companies, but lately, the terminology has evolved to ride-hailing companies. Some more terminologies are also used. In this paper, the authors are using “ride-sharing” for taxi services offered by digital platforms like Uber, Meru and OLA, which includes on-demand as well as carpooling service.

Ridesharing service is a digital platform-based service (such as Uber and OLA) that matches drivers with passengers in real-time to travel from one point to another for a fee. These platforms determine the price of a ride by matching the demand and supply at a given point in time and location. They provide the core service of ‘Rides’ to the consumers via a platform that connects the drivers (with their vehicles registered with the platform) and passengers. A consumer can request a ride through the smartphone application of any such ride-sharing provider by inputting their travel origin and destination. The in-built algorithm matches the passenger with a driver near that location at that time after the passenger confirms the

price computed by the app, based on demand and supply. If the driver accepts the ride, the transaction happens.

A platform-based service like this operates in a different manner than traditional markets. A platform is, essentially, an intermediary that serves two or more sides of the consumers offering different services/products to them and internalises the externalities⁷ generated by each of the groups of customers for the other one (that is, that are not externalities for the platform).⁸

From the above description, it is clear that a ride-sharing platform has two sides — drivers and passengers — that transact for a ride via the platform. Higher demand from passengers attracts more drivers to the platform and more drivers on the platform attract more passengers creating an indirect network effect. Here, both the sides have externalities that are internalised by the platform. Thus, the ride-sharing platform belongs to a two-sided market.⁹

A two-sided market can further be categorised as a *non-transaction market* or a *transaction market*.¹⁰ In a two-sided *non-transaction* market, either there is no transaction between the two sides of the market or it is not observable by the platform, due to which the platform is not able to set a per transaction or per-interaction fee. In this case, the platform usually sets a membership fee to the consumers. In a two-sided *transaction* market, however, transactions occur between the two sides of the market and are observable. The platform is, thus, able to charge a per-transaction fee or even a two-part tariff in the form of membership as well as a usage fee.¹¹

Ride-sharing platforms do not have any membership fee, but they have a booking fee and surcharge included in the fare of every ride booked on the passenger side and commissioned on the driver side. Thus, they are categorised as *two-sided transaction markets*. The working model of a ride-sharing platform differs from the traditional model in several aspects and is characterised by the following features:

Network Effects: Platforms are characterised by indirect network effects and usage externalities.¹² Network effects mean that the number of participants or consumers using a platform is positively correlated with the value they get from their use of this platform.¹³ However, in sharing economy, there are indirect network effects, that is, the number of users on one side attracts more users on the other side. A greater number of cars available with a particular platform will bring the fare down and reduce the waiting time for passengers and will attract more passengers as a result. Likewise, a greater number of passengers on a platform will attract more drivers as the idle time for drivers will reduce and will, therefore, result in more rides (transactions).¹⁴

Price Structure: In a two-sided market, the platform sells its services to two different customer groups on each side. Given the network effects in a multi-sided market, the demand is interlinked. If one side of the platform is more price-sensitive than the other, the platforms typically charge lower or no price on the more sensitive side. This makes the pricing structure of the platform somewhat complex, and thus, the marginal cost is not reflected in the cost of supply to each consumer group. In this complex pricing structure, the platform should be able to internalise the externalities that can arise from pass-through of the costs by businesses to consumers. The revenue model of a ride-sharing platform involves a booking fee on the passenger side and commission/service fee on the driver side.

Economies of Scale: Economies of scale refers to the situation where, as the quantity of output goes up, the cost per unit goes down. The returns on scale production increases as the average cost per unit declines. In online business platforms, network economies of scale play an important role in its success. The marginal cost of adding an extra user on the existing platform is negligible and financial returns on the interaction of a new user with the existing members are high. The increase in the number of users results in an increase in the value of the business. Also, technical economies of scale benefit online platforms. The platform invests in the new technology at once which helps in mass production.¹⁵

A ride-sharing platform's success is attributed to the technical and network economies of scale. The platform incurs technological fixed costs for developing the infrastructure to let consumers and drivers interact, algorithms for pricing and digital matching demand-supply, installation of Global Position System (GPS) and General Packet Radio Service (GPRS). As the fleets are not owned by the ride-sharing platforms, no Capex costs in that regard are incurred by them. The cars are owned by the partner drivers and the related operational costs like fuel, insurance, maintenance, repairs and depreciation of the fleet are also borne by the drivers. There is only some operational cost of maintaining the platform and facilitating the transactions.

Thus, the marginal cost of production of an additional 'ride' is negligible for the platform and production of rides is benefitted from the network effects. In addition, the in-built algorithm matching demand-supply helps in optimum utilisation of the taxi by reducing the idle time for the driver as compared to the traditional model and reduces the per-unit cost of production with the increase in the number of rides.

Multi-homing: When a user is able to have their request processed by more than one intermediary at the same time, the user is said to engage in multi-homing.¹⁶ There is multi-homing on both sides of a ride-sharing platform. The passengers can easily download multiple ride-hailing apps on their phones. Similarly, cab drivers can sign-up to multiple platforms to

provide their services. The zero subscription fee allows drivers and passengers to easily switch to other platforms. However, platforms use various incentives to increase the switching cost of passengers and drivers. These platforms often provide incentive schemes to drivers¹⁷ based on the number of passengers served during a given time window (peak hours during weekdays and/or weekends) to make drivers stick to the platform.¹⁸ For passengers, these platforms provide loyalty programs or discount offers/monthly pass to incentivise their use of the platform.¹⁹

Defining Relevant Market

Defining the relevant market is the first and the most crucial step to any anti-trust case as it defines the ambit of the investigation. The objective is to identify the competing firms and assess the competitive constraints faced by the market players or merging enterprises within the identified market.²⁰ A two-sided market differs in characteristics as compared to a traditional (one-sided) market. The tools applied to define the relevant market in traditional markets like SSNIP (Small but Significant Non-Transitory Increase in Prices) test, critical loss analysis (CLA), diversion ratios and conditional logit demand analyses might not be effective in determining the relevant market in a two-sided or multi-sided market.

As discussed, a two-sided market is sensitive to network effects and usage externalities as it has two sets of consumers. These tests do not take feedback effects into account and, thus, may give flawed results. An anti-trust authority might end up defining the relevant market either too broad or too narrow. This problem calls for modification in these tests and a novel approach in defining the relevant market-specific to two-sided or multi-sided markets.

A general approach to define a 'relevant market' is two-fold. An anti-trust authority first defines the 'relevant product market' followed by a 'relevant geographic market'.²¹ The present definition of a relevant market is designed to cover the traditional one-sided market, but the same can be extended to two-sided markets with some modifications until a new approach is developed for such markets.

Relevant Product Market

A relevant product market is a market comprising all the products or services that are considered 'interchangeable' or 'substitutable' by the consumer on the basis of the characteristics of the products or services, their prices and intended use.²² An authority while identifying substitutability/interchangeability may look for demand-side substitutability or supply-side substitutability or both. Various factors like physical characteristics, end-use of goods; price of goods/service; consumer preferences;

exclusion of in-house production; the existence of specialised producers and classification of industrial products may also be considered while running the substitutability test.²³

In the case of traditional one-sided markets, the authorities generally run the demand side substitutability analysis to define the product market. However, the same might give a flawed result in the case of two-sided markets if the authority considers only consumer side substitutability in defining one relevant market encompassing the two sides as they are inter-related.²⁴

Substitutable products/services from either side might have the potential to impose competitive constraints on the platform. The usage demand of ride-sharing platform depends on the pricing structure of the platform that attracts riders on one side and drivers on the other. In order to look for competitive constraints imposed by competitors on the platform, the authority should also look for factors affecting the transaction costs, pricing strategy or any other limits affecting the bilateral setting of the platform.²⁵

Physical characteristics and intended use

Physical characteristics and intended use of a product or service differentiate it from others and identify the constraints. This is commonly used by the competition authorities to delineate the relevant product market. Here the intended use is transportation. The first step is to list down all the modes of transportation available. Once all the modes of transportation are identified, the physical characteristics of all are described to check the substitutability. The usual modes of transport available are personal vehicles (two-wheelers and four-wheelers), public transport like buses and trains, taxis (traditional and digital cab services), autos/tuk-tuks and other such local transport options. All the available modes of transport within a city perform the same fundamental function of conveying travelers from one point to another but may have distinct technical and functional characteristics and business models.

Digital taxi service platforms like Uber and OLA have distinct characteristics, like point-to-point pick and drop facility, ease of booking, pre-booking facility, round-the-clock availability even at obscure places, predictability in terms of expected waiting and journey time, reliability in terms of GPS/GPRS tracking and ease of payment. The same has also been noted by the CCI in *Fast Track Call Cab vs. ANI technologies (Fast Track Cab vs. Ola)*.²⁶

In this case, CCI had delineated radio taxi services from other modes of transport where radio taxis included digital as well as traditional taxi services. As a first step, a qualitative analysis of this nature is reasonable.

However, this is not sufficient to define the relevant market. Other modes of transport may still pose competitive constraints. Therefore, the competition authority must also conduct a quantitative analysis using stated preference and revealed²⁷ preference.²⁸

These methods involve survey/data collection and analysis and are, thus, time-consuming. The stated preference method can be conducted via a survey where consumers state their preferences by answering the survey questions. For the revealed preference method, the commission could study the actual ridership for the different modes of transport. For this, ridership data is required. Whenever any new means of transport/entity comes into the market, the shift must also be studied over a period of time to analyse the consumer preference.

Within the ride-sharing platforms, there are also various categories of rides like mini, micro, premium and pool. However, we suggest them to be included in the same relevant market as that segregation would make the market too narrow.

Further, in a two-sided market, the authority must also analyse the supply-side substitution. A driver may have options to shift to other ride-sharing platforms, traditional taxi service or auto. These options may impose a competitive constraint on the platform. The same can be done qualitatively as well as quantitatively as described for the demand side substitutability.

Various anti-trust authorities across the globe have dealt with cases (mergers and abuse of dominance) concerning ride-sharing platforms. Most have relied on only qualitative analysis to define the relevant market. We have discussed the approach followed in a few cases below.

In India, in *Fast Track Cab vs. Ola case*,²⁹ the CCI defined the relevant market as ‘radio taxi services in the city of Bengaluru’.³⁰

It relied on the qualitative analysis approach used in the investigation report that asserted that the services provided by OLA and other radio taxi service providers are functionally substitutable and interchangeable by the consumers, but the same is not substitutable with other modes of transportation. The CCI ruled that the distinct key features of the radio taxis, viz. point-to-point pick and drop facility, pre-booking facility, reliability in terms of GPS/GPRS tracking, differentiate them from other modes of transportation.³¹

The commission also considered the applicability of the same regulatory framework on ride-sharing platforms as well as traditional radio taxis to establish their substitutability and keep them in the same relevant market. In another case filed with the CCI,³² the informant (drivers of auto rickshaws

and taxis) defined the relevant product market as '*Paratransit Services*', comprising auto-rickshaws, black-yellow taxis and city taxis reasoning that all these mediums are used by passengers for point-to-point commutation and, thus, compete within the same space. They also asserted that the drivers for these mediums are drawn from the same pool forming a part of the same relevant product market.³³ The CCI, however, argued that even though the auto-rickshaws and taxis serve the same intended use, they are different by virtue of their basic characteristics, consumer preference and prices. Therefore, the CCI defined two relevant product markets in this case: one for radio taxi services and the other for auto-rickshaw services.

Even in international cases like the merger case between City Taxi and Mercury Taxi in the city of Sheffield³⁴ filed with the UK Competition & Markets Authority (CMA),³⁵ or the abuse of dominance and predatory pricing cases against Uber and Easy cabs filed with Uruguay Competition Authority, the relevant market was defined using qualitative analysis only.³⁶ In the case of anti-trust infringement post-Uber and Grab merger,³⁷ the Competition and Consumer Commission of Singapore relied on qualitative analysis and anecdotal evidence only and questioned the credibility of the survey evidence submitted by the parties (though considered along with other available evidence).

SSNIP Test

Other than physical characteristics and intended use, the competition authorities test the substitutability based on the product/service price as well. They use the Hypothetical Monopolist or Small but Significant Non-Transitory Increase in Prices (SSNIP) test to define a relevant market. This method defines the relevant market by determining whether a given increase in product prices would be profitable for a monopolist in the candidate market.³⁸

It analyses if a hypothetical monopolist could sustain a price increase of 5 percent for at least 12 months or induce substitution in a specific market. If the customers switch to another product, then that other product will be included in the relevant market. The SSNIP test is performed using either estimated elasticity of demand or, most commonly, 'critical loss' analysis. The critical loss is the maximum loss of sales that can be sustained by a hypothetical monopolist because of a price increase without rendering the price increase unprofitable.

In the case of a two-sided market, the SSNIP test is not applicable in its conventional form due to interdependencies between the different sides of the market. The drop in demand on one side of the market due to price increase may lead to a drop in demand on the other side, as well. In addition, usually, one side of a platform market is, fully or partially

subsidised by the other side, and that renders price as an unreliable indicator to measure substitutability of the services. As an alternative, it is suggested that in the case of transaction platform markets, the profitability of an increase should be checked in the total price level.³⁹ Some economists have also suggested using other indicators like reduction in quality, but assessing the level of relevance of such results is difficult.

In the ride-sharing industry, on the passenger side, the cab aggregators typically implement dynamic pricing of fares through their web applications. The passengers are shown an upfront price while booking the trip that includes a base fare, rates for estimated time and distance of the route and the current demand for rides in the area, booking fee and any applicable surcharges, fees and tolls if applicable, and any rider promotions or subscriptions (discounts).⁴⁰ They also use an element called “surge pricing” in the algorithm wherein a simple multiplier is assigned to derive surged fare in case of excess demand. This is based on the economic principle of efficient allocation of resources so that the resource goes to its highest-valued use. However, the multiplier is not necessarily displayed on the screen. The passenger sees the total estimated fare.⁴¹ On every ride, these ride-sharing platforms charge a booking/convenience fee⁴² for providing technology services to the riders and a commission/service fee⁴³ charged from the drivers.

Here, the SSNIP test can be performed by observing the profitability of an increase in the total price level. However, the SSNIP test alone may not be reliable to define the relevant market in this market but can be used as one of the indicators.

Relevant Geographic Market

A relevant geographic market is defined as a market comprising the area, in which the conditions of competition for the supply of goods or provision of services or demand of goods or services are distinctly homogenous, which can be distinguished from the conditions prevailing in the neighbouring areas.⁴⁴

To identify the relevant geographic market in the ride-sharing industry, the regulatory ambit of the industry, company policies, transport cost and tolls & tariffs should be considered by an authority. In India, road transport is under state jurisdiction. Cab aggregators are governed by the radio taxi licensing and rules of the state. The cab aggregators also launch features specific to states. In addition, for intercity travels, they have different features or options for booking. When travelling from one state to another, the state border taxes/tolls are charged extra. Fuel prices also vary from state to state.

Thus, from an Indian perspective, for the ride-sharing industry, state boundaries appear to be the relevant market generally defined in the cases. However, it may depend on case facts, as well. A similar approach could be used to define the relevant geographic market in other regions.

The analyses of CCI in ride-sharing industry case laws are also based on the same approach. In *Fast Track Cab v. Ola's* case, the CCI noted that transportation is a state subject and is regulated by the laws and rules of respective states and is homogenous only across a city/state. Also, consumers availing point-to-point local radio taxi services in a particular city would not avail of the radio taxis operating in another city/state. The commission also analysed the supply side substitutability and concluded that a taxi service provider would not generally offer local point-to-point taxi services in another city because of cost, distance, and regulatory barriers. Therefore, the commission defined the relevant geographic market to be the city of Bengaluru. The CCI has followed the same approach in cases concerning the conduct of OLA and Uber in the city of Kolkata⁴⁵ and Delhi-NCR.⁴⁶

Assessment of Dominance/Market Power

The Indian Competition Act defines the term ‘dominant position’ as “*a position of strength, enjoyed by an enterprise in the relevant market, which enables it to operate independently of competitive forces prevailing in the relevant market; or affect its competitors or consumers or the relevant market in its favour*”.⁴⁷ After defining the relevant market, the authority looks into various factors to assess the dominance/market power of the firm under investigation.

A common approach towards assessment of the market power used by the competition authorities includes an assessment of market share in terms of volume of sales or revenue generated by the firms. A market share is a measure of the relative size of a firm in an industry or market in terms of the proportion of total output or sales or capacity it accounts for.⁴⁸ It acts as one of the indicators of market power but cannot be conclusive of the same.⁴⁹

The high-level committee on competition policy and law (i.e. the Raghavan Committee) noted that a dominant position is a position of ‘economic strength’ held by a dominant firm that enables it to behave to an appreciable extent, independently of its competitors and customers.⁵⁰ In addition to market share, factors like entry barriers, the purchasing power of consumers, technical advantages, competitive advantages and economic powers must also be considered to identify the constraints faced by an enterprise on its ability to act independently.⁵¹

It is contended that market share is not a suitable parameter to estimate market power, especially in multi-sided markets. As seen in the Cournot and Bertrand Model, price depends on some function of market share. However, in multi-sided markets, pricing on each side is affected by the degree of competition on all sides.⁵² In general, market power can be directly determined by observing if the price is significantly above the marginal cost. In a multi-sided market, the price may not reflect the marginal cost on each side, so the total price and total marginal cost need to be compared by taking all the sides into account. Besides, factors like barriers to entry, the possibility of consumers on either side to multi-home or single-home, market tipping, price structure, market conditions and any competitive advantages could provide important evidence in assessing the market power in multi-sided markets.

In most Indian cases, the commission has used market shares as an important indicator of market power. In *Fast Track Cabs vs Ola case*, the Director-General (DG) assessed the dominance of OLA in the relevant market from June 2012 till September 2015. The DG computed the market share of players in terms of fleet size, active fleet size and number of trips, based on both yearly (2012-13 to 2015-16) and monthly data (from June 2012-September 2015). The commission analysed the shift in market shares of all the players for the said period with any new player's entry or exit and also relied on the factors mentioned under section 19 (4) and the size and importance of competitors. The commission noted that uniform market share thresholds and a standard time-period to assess the durability of market share cannot be applied to all businesses/sectors in a similar manner although the same can be an important indicator of competitive constraints and dominance.⁵³ There was a similar assessment in other ride-sharing industry cases.⁵⁴

Barriers to Entry and Exit

Barriers to entry analysis are important from the perspective of market definition as well as market power. To assess competition in a market, it is important to observe how easy or difficult is the entry and exit of a firm. Any market with entry and exit barriers is likely to have limited competition; thus, market concentration is probable. It is believed that multi-sided markets are hard to get into due to the existence of indirect network effect and pricing complexity.

In the ride-sharing industry, however, due to low switching costs,⁵⁵ there is multi-homing on both sides and, thus, there is no coordination problem.⁵⁶ In a multi-sided market, the extent of single-homing and multi-homing by customers on each side of the market acts as a key competitive factor.⁵⁷

It affects the price level and the price structure of a platform. However, even though due to less capital investment and multi-homing, there is no major barrier to entry, but building a critical mass still requires effort. A multi-sided market faces chicken and egg problems due to inter-related demand. Even when a global giant like Uber enters a new region for its operations, it needs to put in significant effort to get the drivers on board by approaching directly and also run campaigns and offers discounts to attract riders.⁵⁸

In the Indian cases against OLA, the informants argued that OLA has a strong network, which is a barrier to entry in the market. The commission noted the presence of indirect cross-side network effects but rejected the argument that strong network effects are acting as an entry barrier in the market. The commission emphasised that there was an aggressive competition between Ola and Uber to build a strong network and attract as many riders and drivers on their platforms and that OLA's network was not strong enough to deter the entry of Uber in the market and its rapid expansion. The passengers and drivers can easily switch to another radio taxi app without incurring any costs ("multi-home"). This makes it easy for a new entrant to build its own network. The commission also observed that the entry in the new model as compared to the asset-owned model is easier and hassle-free as there are reduced costs for starting a business.

As against the argument that huge investments and funding received by Ola acts as a key constraint on the new entrants, the commission held that there are no high capital requirements in the new economy as compared to the traditional markets and that the fight for funding and angel investments have made network industries more competitive and have promoted innovation.⁵⁹ We agree with the commission's analysis that the ride-sharing industry is highly competitive and there are no major barriers to entry and exit in the new model.

Conclusion

With the advent of technology, many industries have witnessed new and innovative business models posing competition to the traditional market setups. The new age markets with digital platforms are characterised by features different from traditional markets and the competition law is not equipped to cater specifically to such markets yet. However, with some modifications and caveats discussed in this paper, the existing law can be used to analyse such cases until new tools are developed.

The entry of digital taxi service providers called ride-sharing platforms like OLA and Uber changed India's taxi market dynamics posing challenges to the previously existing radio taxi service providers like MERU Cabs, Mega

Cabs, Easy Cabs and Tab Cabs and other small local taxi service providers all across India. A ride-sharing platform being a two-sided market differs in characteristics from a traditional (one-sided) market. A two-sided market is sensitive to network effects and usage externalities as it has two sets of consumers. The tools applied to define the relevant market in traditional markets like SSNIP test, critical loss analysis (CLA), diversion ratios and conditional logit demand analyses might not be effective in determining the relevant market in a two-sided or multi-sided market, and thus, require modifications for their application to such markets.

Physical characteristics and intended use of a product or service are commonly used parameters by the competition authorities to delineate the relevant product market. With conveyance as the intended use, all modes of transportation need to be assessed for competitive constraints. To begin with, a qualitative analysis using physical characteristics is reasonable, but not sufficient to define the relevant market. The competition authorities must also conduct a quantitative analysis using stated preference and revealed preference through surveys and actual data. Further, in a two-sided market, the authority must also analyse the supply side substitution in a similar way both qualitatively as well as quantitatively. Further, the SSNIP test can also be used as one of the indicators to define the relevant market, however, with a modification to use the profitability of an increase in the total price level for a two or multi-sided market.

To identify the relevant geographic market in the ride-sharing industry, the regulatory ambit of the industry, company policies, transport cost and tolls & tariffs should be considered by an authority. In India, road transport is under state jurisdiction. Cab aggregators are governed by the radio taxi licensing and rules of the state. Further, there are state border tolls and taxes and fuel prices, which vary from state to state. Thus, from an Indian perspective, for the ride-sharing industry, state boundaries appear to be the relevant market generally defined in the cases; however, it may depend on case facts, as well.

With regard to the assessment of market power, it is contended that market share is not a suitable parameter to estimate market power, especially in multi-sided markets. In general, the market power can be directly determined by observing if the price is significantly above the marginal cost, but in a multi-sided market the price may not reflect the marginal cost on each side, so the total price and total marginal cost need to be compared by taking all the sides into account. Besides, factors like barriers to entry, the possibility of consumers on either side to multi-home or single-home, market tipping, price structure, market conditions and any competitive advantages could provide important evidence in assessing the market power in multi-sided markets. In the ride-sharing industry, due to less capital investment and multi-homing, there is no major barrier to entry observed.

Endnotes

- 1 Under Asset- Owned Business Model, the radio-taxis are owned by the radio taxi service providers.
- 2 Under Aggregator Business Model, the operator does not own the radio cabs but only acts as an aggregator (platform) that connects the drivers with the prospective consumer.
- 3 Fast Track Cabs Pvt. Ltd. v. ANI Technologies Ltd., Case No. 6 & 74 of 2015, Para 12 (Competition Commission of India: 2017), <https://www.cci.gov.in/sites/default/files/6%20%26%2074%20of%202015.pdf>; OLA entered in 2011 had a market share of 5-6% in the year 2012-13 which increased to 61-62% in the year 2015-16 (till September 2015). Uber started its operation in August 2013 with a negligible share of less than 1-2% in 2013-14 which increased to 9-10% in the year 2014-15.
- 4 Fast Track Cabs Pvt. Ltd. v. ANI Technologies Ltd., Case No. 6 & 74 of 2015, (Competition Commission of India: 2017), <https://www.cci.gov.in/sites/default/files/6%20%26%2074%20of%202015.pdf>; Meru Travel Solutions Pvt. Ltd. v. Uber India Systems Pvt. Ltd. & Ors., Case No. 81 of 2015 (Competition Commission of India: 2015), <https://www.cci.gov.in/sites/default/files/812015.pdf>; Mega Cabs Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 82 of 2015 (Competition Commission of India: 2016), https://www.cci.gov.in/sites/default/files/26%282%29_82%20of%202015_0.pdf; Meru Travel Solutions Pvt. Ltd. v. Uber India Systems Pvt. Ltd. & Ors, Case No. 96 of 2015 (Competition Commission of India: 2016), https://www.cci.gov.in/sites/default/files/26%282%29_96%20of%202015.pdf; Vilakshan Kumar Yadav & Ors. v. ANI Technologies Ltd, Case No. 21 of 2016 (Competition Commission of India: 2016), <https://www.cci.gov.in/sites/default/files/212016.pdf>; Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 25 -28 of 2017 (Competition Commission of India: 2018), <https://www.cci.gov.in/sites/default/files/25%20-%2028%20of%202017.pdf>.
- 5 Koen Frenken & Juliet Schor, Putting the sharing economy into perspective, 23 *Environmental Innovation and Societal Transitions* 3–10 (2017); <https://www.sciencedirect.com/science/article/pii/S2210422417300114>.
- 6 Y. Benkler, Sharing Nicely: on shareable goods and the emergence of sharing as a modality of economic production, 114 *Yale Law J.*, 273–358 (2004); <https://www.yalelawjournal.org/essay/sharing-nicely-on-shareable-goods-and-the-emergence-of-sharing-as-a-modality-of-economic-production>.
- 7 An externality is an action by either a consumer or producer that affects other producers or consumers, yet is not accounted for in the market price. An externality can be negative – when the action of one party imposes a cost on another – or positive – when the action of one party benefits another party.
- 8 Francesco Russo & Luisa Maria Stasi, Defining the relevant market in the sharing economy, 5(2) *Internet Policy review* (2013); <https://policyreview.info/articles/analysis/defining-relevant-market-sharing-economy>
- 9 Evans, D.S. The Antitrust Economics of Multi-Sided Platform Markets, 20(2) *Yale Journal on Regulation*, 325-381 (2003); <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1144&context=yjreg>

- 10 Lapo Filistrucchi, Damien Geradin, Eric van Damme & Pauline Affeldt, Market Definition in Two-Sided Markets: Theory and Practice, 10(2) Journal of Competition Law & Economics 293–339 (2014)
- 11 *Ibid.*
- 12 Gains from trade between end-users almost always arise from usage; Jean-Charles Rochet & Jean Tirole, Two-Sided Markets: A Progress Report, (2005); http://idei.fr/sites/default/files/medias/doc/wp/2005/2sided_markets.pdf
- 13 Carl Shapiro., & Hal R. Varian, Information Rules, A Strategic Guide to the Network Economy (1st Ed. 1998)
- 14 Cassey Lee, Dynamics of Ride Sharing Competition, ISEAS Economics Working Paper No. 2017-05 (2017), <https://think-asia.org/bitstream/handle/11540/7689/ISEASEWP2017-05Lee.pdf?sequence=1>
- 15 Giacomo Büchi, Monica Cugno & Rebecca Castagnoli, Economies of Scale and Network Economies in Industry, SYMPHONY Emerging Issues in Management, n. 2, (2018)
- 16 Caillaud, B., Jullien, B., Chicken and egg: competition among intermediation service providers, 34 (2) RAND Journal of Economics 309 – 328, (2003).
- 17 Ola's schemes like 'Ola Star' provided the drivers medical insurance, scholarships for their children etc. 'Ola Pragati' a unique financial program in association with SBI provided the drivers with low interest loans; and empower them to pay their EMIs on a daily basis.
- 18 Gopi Arora, Ola Busy In Wooing Drivers, Launches Rewards-Oriented Initiatives, Inc42 (March 23, 2015), <https://inc42.com/buzz/ola-rewards/>; Mohul Ghosh, Taxi App Chronicles: Ola Offers 2BHK Flat As Incentive To Their Drivers; Uber Hikes Tariff 5X In Mumbai, Trak.in (June 17, 2015), <https://trak.in/tags/business/2015/06/17/ola-offers-2bhk-flats-drivers-uber-5x-price-hike/>.
- 19 Ola and Uber offers share passes/ ride passes to their passengers to avail discounted rides and rides at lower prices during peak hours; <https://www.olacabs.com/sharepass>; <https://www.uber.com/en-IN/blog/assured-savings-with-ridesmart-rewards-august/>.
- 20 European Commission, Commission Notice on the definition of the relevant market for the purposes of Community competition law, OJ C 372 (1997).
- 21 The Competition Act, 2002, (12 OF 2003), Section 2 (r) defines the 'relevant market' as a market determined with reference to the relevant product market or the relevant geographic market or with reference to both the markets.
- 22 The Competition Act, 2002, (12 OF 2003), Section 2 (t)
- 23 The Competition Act, 2002, (12 OF 2003), Section 19 (7)
- 24 Lapo Filistrucchi, Market Definition in Multi-Sided Markets- Note by Dr. Lapo Filistrucchi, DAF/COMP/WD(2017)27/FINAL, Organization for Economic Co-operation and Development (January 12, 2018), [https://one.oecd.org/document/DAF/COMP/WD\(2017\)27/FINAL/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2017)27/FINAL/en/pdf)
- 25 *Id.*

- 26 Fast Track Cabs Pvt. Ltd. v. ANI Technologies Ltd., Case No. 6 & 74 of 2015, Para 8 (Competition Commission of India: 2017), <https://www.cci.gov.in/sites/default/files/6%20%26%2074%20of%202015.pdf>
- 27 Revealed preferences surveys (RP) are about choices that individuals have actually made. In terms of a public transport surveys, the revealed information would be the actual trip or trips made by the user considering origin, destination, origin stop, destination stop, journey purpose, and the mode of transport they chose to use from the available alternatives. The strong point of this type of survey is that it provides us with the real choices made by users in a determined context of constraints.
- 28 *Supra Note. 24.*
- 29 Fast Track Cabs Pvt. Ltd. v. ANI Technologies Ltd., Case No. 6 & 74 of 2015, Para 8 (Competition Commission of India: 2017), <https://www.cci.gov.in/sites/default/files/6%20%26%2074%20of%202015.pdf>
- 30 *Id.* at Para 64 – 66.
- 31 *Id.* at Para 10.
- 32 Vilakshan Kumar Yadav & Ors. v. ANI Technologies Ltd, Case No. 21 of 2016 (Competition Commission of India: 2016), <https://www.cci.gov.in/sites/default/files/212016.pdf>
- 33 *Id.* at Para 4.
- 34 City Taxis and Mercury Taxis are private hire operator based in Sheffield city with licensed drivers pre-Merger. United Kingdom has two categories of point to point transportation services: Private hire vehicles and Hackney carriages.
- 35 Sheffield City Taxis/Mercury Taxis, Case no. ME/6548-15 (Competition and Markets Authority:2015), https://assets.publishing.service.gov.uk/media/56322eaa40f0b674d3000012/Sheffield_City_Taxis-Mercury_Taxis_-_Non-Confidential_full_text.pdf.
- 36 The first case was a suo moto case that commission took up on its own when the taxi drivers' union (CPATU) penalized the taxi drivers for using an Internet app such as Easy Taxi or Safer Taxi to get customers and not using its radio dispatcher to allocate journeys in the Montevideo Department. The second and third were filed by the Asociación de Taxis against the Easy Taxi app for predatory pricing and against uber for abusing its dominant position.
- 37 Sale of Uber's Southeast Asian business to Grab in consideration of a 27.5% stake in Grab, Case No. 500/001/18 (Competition & Consumer Commission of Singapore: 2018), <https://www.cccs.gov.sg/media-and-consultation/newsroom/media-releases/grab-uber-id-24-sept-18>.
- 38 Øystein Daljord, Lars Sørsgard, & Øyvind Thomassen, The SSNIP test and market definition with the aggregate diversion ratio: A reply to Katz and Shapiro, *Journal of Competition Law and Economics* (2008).
- 39 Yang Sung Yoon, Rethinking Modes of Relevant Market Definition for Multisided Platform, comparative research on EU and Korea cases (2018).

- 40 How are fares calculated?, Uber Help, <https://help.uber.com/riders/article/how-are-fares-calculated?nodeId=d2d43bbc-f4bb-4882-b8bb-4bd8acf03a9d>
- 41 Id.
- 42 Id.; Ola's Terms of Service with Customer, Clause 1(v), <https://olawebcdn.com/v1/docs/website-tnc.html>
- 43 What is the Uber service fee?, Uber Marketplace, <https://marketplace.uber.com/pricing/service-fee>
- 44 The Competition Act, 2002, (12 OF 2003), Section 2(s)
- 45 Meru Travel Solutions Pvt. Ltd. v. Uber India Systems Pvt. Ltd. & Ors., Case No. 81 of 2015 (Competition Commission of India: 2015), <https://www.cci.gov.in/sites/default/files/812015.pdf>
- 46 Meru Travel Solutions Pvt. Ltd. v. Uber India Systems Pvt. Ltd. & Ors, Case No. 96 of 2015 (Competition Commission of India: 2016), https://www.cci.gov.in/sites/default/files/26%282%29_96%20of%202015.pdf; Mega Cabs Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 82 of 2015 (Competition Commission of India: 2016), https://www.cci.gov.in/sites/default/files/26%282%29_82%20of%202015_0.pdf
- 47 The Competition Act, 2002, (12 OF 2003), Explanation (a) Section 4
- 48 OECD, Market Share, Glossary of Statistical Terms, <https://stats.oecd.org/glossary/detail.asp?ID=3257>
- 49 AKZO Chemie BV vs Commission of the European Communities, case C-62/86 (European Commission: 1991), United Brands Centraal BV v Commission of the European Communities, CASE 27/76 (European Commission: 1978) and Hoffman-La Roche v Commission, Case 85/76 (European Commission: 1979).
- 50 Government of India, Report of the High Level Committee on Competition Policy and Law, Para 4.4.8 (2000), https://theindiancompetitionlaw.files.wordpress.com/2013/02/report_of_high_level_committee_on_competition_policy_law_svs_raghavan_committee.pdf
- 51 The Competition Act, 2002, (12 OF 2003), Section 19 (4) (a) – 19 (4) (m)
- 52 David S. Evans, The Antitrust Economics of Multi-Sided Platform Markets, Yale Journal on Regulation, Vol.20 Issue 2 (2003)
- 53 Case No. 6 & 74 of 2015, Para 84 at 14.
- 54 Case No. 81 of 2015; Case No. 86 of 2015; Case No. 96 of 2015; Case No. 21 of 2016; Case No. 25 -28 of 2017.
- 55 When consumers multi-home with available substitutes, the platforms tend to lower their prices and compete rigorously for the consumers. In a platform market, multi-homing on one side of the market is enough to have significant consequences on the prices. The firms compete aggressively for the single-homing consumers. In ride sharing platforms, both passengers and drivers multi-home as the switching costs are very low which suggests that the market is highly competitive. With low switching costs there are no consumer lock-in effect which makes it easier for the consumers to multi-home.

- 56 Consumers on one side are reluctant to switch unless they expect that some consumers on the other side(s) will also switch.
- 57 Jean-Charles Rochet & Jean Tirole, Two-Sided Markets: A Progress Report, (2005); http://idei.fr/sites/default/files/medias/doc/wp/2005/2sided_markets.pdf
- 58 Michael Blanding, How Uber, Airbnb And Etsy Attracted Their First 1,000 Customers, Forbes (Jul 13, 2016, 10:11 AM), <https://www.forbes.com/sites/hbsworkingknowledge/2016/07/13/how-uber-airbnb-and-etsy-attracted-their-first-1000-customers/#5ef0b5762139>
- 59 Case No. 6 & 74 of 2015, Para 96 at 14.

Epilogue

Technology-induced innovation has taken over the future of production and consumption of goods and services, globally. Producers and consumers across the globe are increasingly relying on technologies to produce and sell products and services. Such rapidly changing, increasingly complex and information-driven markets for goods and services do pose new challenges for all stakeholders including regulators. While such challenges are common across various countries, it is quite challenging in a country, such as India where the consumer market is quite diverse. It comprises of a huge middle class, relatively large affluent class, and a huge poor and disadvantaged class. It, therefore, presents some unique challenges for policymakers, regulators, manufacturers, distributors, and consumers.

Currently, India is one of the largest and fastest-growing markets for digital consumers, with 560 million internet subscribers,¹ second only to China. Improved availability of bandwidth than what it was a few years ago, affordable data plans, easy availability of low-cost mobiles and their demonstration effects have rapidly bridged the digital gap between urban and rural India.

This increase in usage of the Internet has significantly contributed to the rise in the e-commerce market. As per the Economic Survey 2017-18,² the e-commerce market in India is estimated to be US\$33bn, with a 19.1 percent growth in 2016-17. As per the National Association of Software and Services Companies (NASSCOM) Strategic Review 2018, the Indian e-commerce market reached US\$ 38.5 billion, growing at a rate of about 17 percent in the financial year 2018-19. In 2018, the sale of physical goods via digital channels in India amounted to US\$ 22 billion in revenues.³

The above-mentioned numbers are certainly to swell in the coming years and more consumers would rely on the internet either to make or to guide their purchasing decision or behaviour. Even if the consumers do not make a digital purchase, online information can significantly influence her/his purchasing decision/behaviour. Thus, the internet has facilitated easy access

to various goods and services that were otherwise not available locally. Affordability, convenience, accessibility and wider choice are, therefore, the prime reasons for wider acceptance of online purchases. Consumers are now flooded with various goods online, with the freedom to choose and buy.

While the online consumer marketplace is growing at a rapid rate and offers considerable potential economic and consumer benefits, technologies causing disruption continues to evolve. Digital platforms have already shifted their focus from the classical approach of doing business wherein the goal of a private company was to maximise profits. Current business models focus on growth over profits in the short to medium terms, i.e. the maximisation of the number of users rather than profits.⁴ Dominant platforms can afford such a business strategy given their leeway to incur losses by investors. For example, Amazon was permitted by investors to grow without pressure to show profits and thereby expanded its business and entrenched its dominance as an e-commerce marketplace.⁵

Dominant platforms have also expanded into other related businesses, with the objective of accessing more data. For example, Google provides its Android operating system free of charge to mobile telephone manufacturers, thereby enabling it to collect user data.

Such dominant platforms do not face much competition and consumers are left with any or few choices and have almost no control over the collection and use of their data. This has raised competition, regulatory and consumer protection concerns worldwide.⁶ Thus, despite the many benefits that digital innovation has brought, there are growing concerns. There are fears such as data theft and loss of privacy, replacement of labour by machines (job losses), the domination of the economy by a few ecosystems and platforms, etc.⁷

Also, the majority of consumers who avail e-commerce facilities are quite skeptical about the timely delivery of goods purchased, after-sales services, impartial and swift redressal mechanisms, counterfeit products and the reliability of the description of goods offered. Likewise, the absence of trust between consumers and suppliers or retailers is a key issue in the operation of online platforms.

Online identity theft and phishing is also a growing concern among consumers. Stealing and using a person's banking information and using it to purchase goods or steal money is becoming quite common. Online medium easily allows perpetrators to impersonate lawful business activities far more convincingly and trap vulnerable victims. Often, even before the victims realise being cheated the perpetrators get away from detection by maintaining anonymity. They become elusive as they keep relocating when detected.

Besides e-commerce having no defined borders, cooperation and coordination at the international level, particularly when there is hardly any domestic legislation for protection is a key challenge.

Furthermore, it's not just e-commerce, the digital revolution has radically changed the way consumers and financial institutions interact. An increasing number of financial entities and technology firms are regularly testing out new technological and financial solutions to make their businesses more and more innovative. To a considerable extent such innovations, including actions on the part of the Government, are successful in attracting digital financial consumers as it has now become a norm among people, especially in urban areas, to access financial services with the aid of technology.

Over the past two years, digital payments have registered tremendous growth in India. According to the Reserve Bank of India, the volume of digital payment transactions in the year 2015-16 was INR 292.8 crores, which increased to INR 921.7 crores in 2017-18.⁸ Changing consumer behaviour has been driving the growth of digital payment systems as more and more consumers are embracing mobile technology.

New payment modes like Bharat Interface for Money-Unified Payments Interface (BHIM-UPI), Aadhaar-enabled Payment System (AePS) and National Electronic Toll Collection (NETC) have transformed the digital payment ecosystem by increasing Person to Person (P2P) as well as Person to Merchant (P2M) payments. At the same time, existing payment modes such as debit cards, credit cards, Immediate Payment Service (IMPS) and Pre Paid Instruments (PPI) have registered substantial growth. With this exponential growth, new payment modes have emerged as a convenient alternative to existing payment modes.⁹ While such a growth in digital financial services has ensured the inclusion of millions of more consumers into this new and emerging ecosystem, the rapid development of technologies and constant changes have forced some of the consumers to stay out or become more vulnerable.

However, to date, the majority of the Indian rural population is unfamiliar with formal financial services, let alone technology-based financial products and services. Their poor levels of literacy, including financial literacy, act as a key barrier. They hardly understand even a simple text message on their phone and often perceive financial service and products complex and difficult to comprehend. Besides those who understand and show a willingness to do digital transactions are often marred with poor network coverage, insufficient infrastructure and other types of risks including denial of service attacks, fraudulent money transfers, identity theft and data breaches. Thus, most of the consumers do not feel confident to conduct transactions safely and efficiently. There is a sense of lack of trust among several consumers.

Therefore, while the government has introduced Jan Dhan Yojana, Kisan Credit Card, Bhamashah Yojana, etc., to enhance the financial inclusion of rural consumers more efforts are needed to enhance their capacity, particularly that of women towards financial literacy and awareness. At present, the approach taken by the financial sector in India is largely based on the doctrine of *caveat emptor* (let the buyer beware). Other than providing protection from fraud and provisions to ensure full disclosure, consumers are generally left on their own.

Thus, the vulnerability of consumers coupled with inadequate financial literacy is hovering over the financial regulation space in India. As a result, the situation is becoming much more challenging when the financial services are carried out with the aid of new technologies. According to the Reserve Bank of India, during the year 2015-16, 2016-17, 2017-18, the number of registered cases of fraud involving ATM/debit cards, credit cards and internet banking stood at 1,191, 1,372 and 2,059, respectively.¹⁰

Moreover, the financial system in India has many regulators, each having its mandate. Policy-related uncertainties keep arising from the diversity of different legislations and the overlapping of the regulatory jurisdictions. Such confusions coupled with the absence of timely and accessible complaint and dispute resolution mechanisms shackle the very trust of consumers. The usual 'buyer beware' approach is not adequate in this sector and the regulators must place the burden upon financial firms of doing more in the pursuit of consumer protection.

Likewise, mobile internet speed and connectivity issues remain unresolved in most parts of the country. The U.S.-based data speed tester Ookla has ranked India 121st, almost at the bottom of its list of 138 nations, on overall mobile internet speeds. The data speed is much lower than most of our neighbours, including China, Sri Lanka and Pakistan. With a rank of 108 at the beginning of 2019, it has fallen to 121, while China is at 51, Sri Lanka at 63 and Pakistan at 110.

Regulatory Mechanism

In this digital age, authorities around the world are concerned with new challenges in regulatory, competition and consumer protection aspects. The Governments, therefore, have a significant role to update, adapt and maintain a stronger competition and consumer protection framework that is efficient and responsive to the interconnected nature of various digital services. This would aid the growth of a digital economy and protect consumers' digital rights, like in most developed countries wherein their governments have enacted laws that promote such interactions.

In India, exclusive law regulating e-commerce is yet to be evolved through the Department of Consumer Affairs have on August 02, 2019, issued its e-commerce guidelines for consumer protection in order to safeguard the interest of such consumers. However, regardless of the lack of any such legal framework to regulate digital transactions, quite a remarkable number of marketing interactions happen daily through online. Therefore, the Government is in the process of coming out with an E-commerce Policy.

In this context, it is important to mention that the Competition Act of India, 2002 alone is inadequate to deal with changing the business environment in telecommunications, technology and e-commerce, including in addressing the government's own role in distorting competition in the market place. Various other legislation, like the Legal Metrology Act, 2009, the Packaged Commodities Rules 2011, the Indian Contract Act 1872, Information Technology Act, 2000, the Food Safety and Standards Act, 2006 and Drugs and Cosmetics Act 1940, all in their own way help a bit in protecting consumers from online purchases but is never a complete solution. These legislations fall short to address the intricacies and technicalities involved in digital transactions. The recently published e-commerce market study¹¹ by the Competition Commission of India, also hints at the inadequacy of competition enforcement alone to deal with flagged concerns such as platform neutrality, platform-to-business (P2B) contract terms and deep discounting. The study falls short of advocating P2B regulation – it calls for self-regulation by platforms – as a step towards a solution.

Also, there are over sixty plus legislations and multiple rules and regulations that govern the financial sector in India.¹² However, many of them date back several decades when the financial landscape was very different from what is being witnessed today. For instance, the Reserve Bank of India Act was enacted in the early 1930s while the Insurance Act was enacted in the year 1938. While these regulations and laws are continuously evolving, more needs to be done to protect digital consumers. Much hope is now laid on the recently enacted Consumer Protection Act, 2019. A stronger consumer protection framework in this sector is vital to building the consumers trust and confidence

Conclusion and the Way Forward

Imperative of International Cooperation and Learning

It's a fact that there is risk involved while using the internet for purchasing goods and services through financial transactions. Only a stronger, but optimal, competition and consumer protection framework in line with the recommendations of various national experts and international bodies can ensure security and reliability, without compromising the possibility of

innovation. Towards achieving this end, good practices from other countries can become a guiding light. Along with this, there is a need to boost international coordination in e-commerce to avoid unilateral actions as that could stifle trade and lead to uncompetitive practices. Systems like online dispute resolution will certainly be a good initiative to address possible consumer grievances in cross-border e-commerce transactions.

Coordination among Regulatory Agencies

Digital technologies and market evolution are often expeditious and random any rules framed to protect the consumers, therefore, need to be flexible and adaptive enough to the changing scenarios and their objectives. Besides them, effective coordination among various agencies is vital for stricter monitoring and enforcement of consumer protection provisions related to digital transactions that are currently scattered across various legislations. Consumer protection in the digital value chain cannot be regulated alone by a single agency. Various agencies such as the competition authority, financial regulators, network security agencies and even agencies telecommunications regulators need to intervene in a coordinated manner, but this hardly happens. They should be put into a regulatory sandbox to design optimal regulations for e-commerce.

Undertake Regulatory Impact Assessment

Regulatory instruments have widespread impacts and affect multiple stakeholder groups in different ways. A sub-optimal regulation has the potential to increase the cost of administration and compliance, have unintended outcomes and limit the likelihood of achievement of its objectives. Therefore, it is of paramount importance to understand the impacts of any regulation, proposed or in operation, to achieve favourable outcomes.

Regulatory Impact Assessment (RIA) is a process of systematically identifying and assessing direct and indirect impacts of regulatory proposals and existing regulations, using consistent analytical methods. It involves a participatory approach via a public consultation to assess such impact, determination of costs and benefits, and selection of the most appropriate regulatory alternative. Thus, RIA can help measure the effectiveness of existing laws and regulations and help weed out those that hurt business growth and consumer welfare.

Adopt a National Competition Policy

There is the need to adopt a National Competition Policy in India¹³ with a focus on the objectives of free and fair competition, consumer welfare and the abuse of dominant power wielded by the Government and companies. Such a policy is necessary to unlock the economic potential of the country for creating a transparent, non-discriminatory and pro-competitive ecosystem in

this digital era. More importantly, the country needs to undertake a rigorous cost-benefit assessment of laws and regulations to help remove impediments to national growth.

Empower Consumers

Finally, other than strengthening the laws and regulations related to digital transactions, consumer education and financial literacy need to be twined with consumer protection, as consumers themselves are the best guardians of their rights and responsibilities. Adequate importance should be given to empower consumers to make the right choices, in particular by ensuring that they have the right information and the possibility to switch or quit when needed. Financial inclusion schemes become oblivious if consumers remain poorly informed on how to encounter a problem while using digital services. They need to be aware of various grievance redressal mechanisms available to them. Such an increase in awareness would act as a bridge towards building consumer trust in the digitally-enabled ecosystem, thereby prompting them to use digital services.

However, the Government alone cannot adequately address several of these challenges whether from the perspective of the market or that of the consumers. There is a need for all stakeholders – the government, regulators, business institutions, consumer organisations and elected representatives – to work together to gain consumer trust and confidence in this new and emerging digital world.

Reference

Cheriyian, George and Simi T B (2019). Protecting the Digital Consumers: Challenges and Possible Solution. International Journal on Consumer Law and Practice, Volume 7, 2019.

Endnotes

- 1 Telecom Regulatory Authority of India (TRAI) Press Release No. 40/2019.
- 2 E-Commerce Market growing at a rate of about 17% in 2018-19, PIB Gov of India, 17 Dec 2018.
- 3 Retail e-commerce sales in BRIC countries in from 2016 to 2023, Statista. Accessible at <www.statista.com/statistics/255268/bric-b2c-e-commerce-sales>
- 4 Competition issues in the digital economy, Note by the UNCTAD secretariat, TD/B/C.I/CLP/54, 1 May 2019. Accessible at <https://unctad.org/meetings/en/SessionalDocuments/ciclpd54_en.pdf>
- 5 L Khan, Amazon's antitrust paradox, The Yale Law Journal, 126(3), p. 564-907, 2017.
- 6 *Supra*, 4
- 7 J Crémer, Yves-Alexandre & H Schweitzer, Competition policy for the Digital Era, European Commission. Accessible at <<https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>>
- 8 <https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CDDP03062019634B0EEF3F7144C3B65360B280E420AC.PDF>
- 9 Digital Transactions Registered Tremendous Growth, Press Information Bureau, Govt of India, Ministry of Electronics & IT, 9 Nov 2018. Accessible at <<http://pib.nic.in/newsite/PrintRelease.aspx?relid=184668>>
- 10 <https://economictimes.indiatimes.com/industry/banking/finance/banking/over-900-cases-of-fraud-involving-cards-net-banking-registered-in-apr-sep-2018/articleshow/67977230.cms?from=mdr>
- 11 https://www.cci.gov.in/sites/default/files/whats_newdocument/Market-study-on-e-Commerce-in-India.pdf
- 12 Some of the legislations are – The Chit Funds Act 198; National Housing Bank Act, 1987; Banking Regulation Act, 1987; Banking Regulation Act, 1949; Deposit Insurance and Credit Guarantee Corporation Act, 1961; Reserve Bank of India Act, 1934; Securities and Exchange Board of India Act, 1992; Recovery of Debts Due to Banks and Financial Institutions Act, 1993; Foreign Exchange Management Act, 1999; Banking Ombudsman Scheme, 2006 (governs resolution of consumer disputes); Insurance Act, 1938; The Public Liability Insurance Act, 1991; The Insurance Regulating and Development Authority Act, 1999; Consumer Protection Act, 1986; Competition Act 2002 and many more.
- 13 <https://economictimes.indiatimes.com/blogs/et-commentary/national-competition-policy-compete-not-also-run/>

ISBN 978 81 8257 281 2



9 788182 572812