ISSN 2249-5630

Nirma University Journal of Business and Management Studies

Vol.1, Nos. 2 & 3; April - September 2018

Articles

Book Review

NIRMA UNIVERSITY
INSTITUTE OF MANAGEMENT
NAAC ACCREDITED 'A' GRADE

Institute of Management

SAQS ACCREDITED

Send your feedback to:
The Editor, Nirma University Journal of Business And Management Studies, Institute of Management, Nirma University, S.G. Highway, Ahmedabad 382481, Gujarat, India.
Tel: +91 79 3064 2000, +91 2717 241900-4
Fax: +91 2717 241916
Email: nujbms.im@nirmauni.ac.in
Website: www.nirmauni.ac.in/imnu

Annual Subscription

Rates by Post	**India**	**Overseas**
for Individuals	Rs. 500	US $ 15
for Institutions	Rs. 1000	US $ 25

For subscription related enquiries write to:

Nirma University Journal of Business And Management Studies, Institute of Management, Nirma University, S.G. Highway, Ahmedabad 382481, Gujarat, India.
Tel: +91 79 3064 2000, +91 2717 241900-4
Fax: +91 2717 241916
Email: nujbms.im@nirmauni.ac.in
Website: www.nirmauni.ac.in/imnu

Payment may be made by crossed demand draft drawn in favour of "Institute of Management, Nirma University", payable at Ahmedabad.

Claims for missing issues should be made within three months of publication.

Printed and published by Dy. Registrar, IMNU on behalf of the Institute of Management, Nirma University, Sarkhej-Gandhinagar Highway, Ahmedabad 382481, Gujarat, and printed at M/s. Shivkrupa Offset Printers, 3 J/K Block Ravi Estate, Opp. Gurudwara BRTS Bus-stop, Dudheshwar, Ahmedabad-380004 and published from Institute of Management, Nirma University, Sarkhej-Gandhinagar Highway, Ahmedabad 382481, Gujarat

* *New Series*

Nirma University Journal of Business and Management Studies

NUJBMS, Vol. 1, Nos. 2 & 3, April - September 2018

Contents

Articles

Book Review

An Overview of the Smart Cities Mission of India: A Case of Smart Cities of Gujarat

Hastimal Sagra*

Faculty of Commerce,
GLS University,
Ahmedabad

CONTEXT

Half of the world's population lives in cities, generating more than 80% of the global GDP (McKinsey Global Institute, April 2011), and it is predicted that three fourths of the world population will be living in cities by the year 2050. Modern cities have grown into magnets of economic advancement and industrialization. According to the Population Census of India, "About 30% of the total population of India lives in 7935 towns", (The Hindu, 2011) with a contribution of two thirds of the Indian GDP (World Bank). The top 100 cities are home to 16% of India's population and their contribution amounts to 43% of the national income of the country. Metros like Greater Mumbai, Delhi, Kolkata, Chennai, Bengaluru, Hyderabad, Ahmedabad, and Pune have rapidly grown during the previous century, and so have the smaller cities and towns (Urban India 2011: Evidence). Urban conglomerates have enormously attracted populace from diverse backgrounds in search of an augmented life. The increase in urbanization exerts immense pressure on the existing infrastructure, food supplies, water supplies, traffic

management, waste disposal systems, sustainability, and on the overall quality of life (Vadgama et al., 2015:1). Poor infrastructure, densely populated unhygienic slums, deficient public utilities, and overcrowded public spaces in Indian cities characterize their regressive nature.

It is imperative for the government to introduce technology and build smarter solutions for burgeoning urban problems. Realigning policy, planning, and institutional frameworks are critical for successful urban innovations in rapidly urbanising cities of the global south (S. Praharaj et al., 2018:42). Adaption of ICT in urban development is an important enabler in accomplishing sustainability and good governance. In 2015, the Government of India initiated a potentially revolutionary project called the 'Smart Cities Mission' to transform 100 Indian cities into smart ones in a span of the next five years The mission is essentially positioned for two larger motives; firstly, to deliver urban development agenda, and secondly, to create role model cities for urban India.

According to Frost (2003) smart cities include smart governance, smart education, smart healthcare, smart building, smart mobility, smart infrastructure, smart technology, smart energy, and smart citizens. The Intelligent Community Forum (ICF), a New York-based think tank defines smart cities as "Cities and regions that use technology not just to save money or make things work better, but also to create high-quality employment, increase citizen participation and become great places to live and work" (Forbes, 2015). The smart city concept is about creating an ideal city by clustering smart people and smart institutions together for a good quality of living through smart governance, smart management, and smart solutions to urban problems at lower costs, with fewer resources. A smart city is a completely citizen centric and equitable city that offers a good quality life.

SMART CITIES MISSION

The Smart Cities Mission is an urban development scheme by the Government of India, in motion since June 25, 2015. This five year mission is meant to set an example that can be replicated both within and outside the smart city, catalysing the creation of similar smart cities in various regions and parts of the country. The government wants to build 100 smart cities in the near future. It enables leveraging of strengths and opportunities of each city for comprehensive improvement of the built environment, local economy, and quality of life of citizens (Livemint, 2016). The aim of the Smart Cities Mission is better governance and reliable citizen services, efficient waste management, congestion free traffic management, and uninterrupted power and water supply. The strategic components of area-based

development in the Smart Cities Mission are city improvement (retrofitting), city renewal (re-development), and city extension (Greenfield development), plus a pan-city initiative in which Smart Solutions are applied covering larger parts of the city.

Table 1: Distribution of Smart Cities in State/ Union Territories in India

Name of State/UT	No. of Smart Cities	State/UT	No. of Smart Cities	State/UT	No. of Smart Cities	State/UT	No. of Smart Cities
A & N Islands	1	Delhi	1	Laksha-dweep	1	Punjab	3
Andhra Pradesh	3	Goa	1	Madhya Pradesh	7	Rajasthan	4
Arunachal Pradesh	1	Gujarat	6	Maharashtra	10	Sikkim	1
Assam	1	Haryana	2	Manipur	1	Tamil Nadu	12
Bihar	3	Himachal Pradesh	1	Meghalaya	1	Telangana	2
Chandigarh	1	Jammu & Kashmir	1	Mizoram	1	Tripura	1
Chhattisgarh	2	Jharkhand	1	Nagaland	1	Uttar Pradesh	13
Daman & Diu	1	Karnataka	6	Odisha	2	Uttarakhand	1
Dadra & Nagar Haveli	1	Kerala	1	Puducherry	1	West Bengal	4

Source: Drawn on data sourced from https://www.indiatvnews.com/news/india/know-all-100-upcoming-smart-cities-of-india-50276.html

From Table 1, it can be stated that the Smart Cities Mission has a pan-India presence. Tamil Nadu (12), Maharashtra (10), Uttar Pradesh (13), Madhya Pradesh (7), Gujarat (6) and Karnataka (6) have been awarded with the largest number of cities selected under the mission. Southern India has more selected cities than any other region in the country. According to the High Powered Empowered Committee on Urban Infrastructure (HPEC), ₹700,000 crores are required for the next 20 years to bridge the existing gaps in India's urban infrastructure (Bhattacharya, at el., 2015:23). In fact, union territories have also been awarded with one city each, selected for the mission. Reportedly "Twenty cities make it in the first phase of the ambitious urban modernization programme with about ₹50,000 crores as part of the Smart Cities Mission of the government, to improve the quality of life of 3.54

crore people" (Times of India, Ahmedabad, 29 January, 2016). The cities in order of ranking are: Bhubaneswar, Pune, Jaipur, Surat, Kochi, Ahmedabad, Jabalpur (Madhya Pradesh), Visakhapatnam, Solapur (Maharashtra), Davanagere (Karnataka), Indore, New Delhi Municipal Council (Delhi), Coimbatore, Kakinada (Andhra Pradesh), Belagavi (Karnataka), Udaipur, Guwahati, Chennai, Ludhiana, and Bhopal (Livemint, 2016). In four different rounds, 100 cities were selected on the basis of a competition that gauged preparedness, financial strength, and past performance as important parameters of selection. Interestingly, Mumbai, Chennai, and Kolkata have not been incorporated in the mission.

PROGRESS IN SMART CITIES MISSION

The central government has proposed to give financial support to the mission to the extent of about ₹50,000 crores over five years, i.e. on an average ₹100 crores per city per year. An equal amount, on a matching basis, will have to be contributed by the State/Urban Local Bodies (Vadgama, 2015:1). According to the Rajya Sabha TV[1] (2018), 'Under Smart City Mission, 2948 projects worth ₹138730 crores are going on, and 189 projects worth ₹2237 crore have already been completed in 99 cities. Work on building up of smart roads in 36 cities, integrated command and control projects in 30 cities, smart water projects in 37 cities, solar energy projects in 44 cities, and beautification projects in 40 cities is under way.

According to Pratap (undated), the formation of the National Investment and Infrastructure Fund (NIIF) with an initial authorized corpus of ₹20000 crores is anticipated to endow the infrastructural projects with financial support. Several government schemes AMRUT, SBM, HRIDAY, Digital India, Skill development and Housing for All would be converged to pool funds for this mission. Capital would also be raised through public private partnership (PPP) and municipal bonds. Countries including Japan, Singapore, Canada, Germany, France and Spain have agreed to collaborate with India on this mission. User charger is likely to contribute towards maintenance and sustainability of the smart cities. Financial assistance of US $ 500 million and US $ 1 billion from World Bank and Asian Development Bank respectively to the Special Purpose Vehicle (SPV) of each smart city would augment financial strength of the mission.

In case of India, where urban authorities own a large amount of unmanaged and non-profit-making assets; instead, opportunities should be explored to understand how smart technology can be applied to the existing infrastructure and services to make them more

[1]https://www.bing.com/videos/search?q=rs+tv+smart+city&&view=detail&mid=E57B93BFF05659AF5EF7E57B93BFF05659AF5EF7&&FORM=VRDGAR

reliable and efficient (S. Praharaj et al., 2018:42). The government needs to identify the extent to which upgradation of existing infrastructure is possible, and where building of new infrastructure is needed. Bhattacharya, at el., (2015:50) are of the view that many countries are interested in partnering with Indian firms on smart city ventures. Here again, the government needs to identify projects that necessitate foreign funding and technical collaboration under the mission.

Table 2: Funds Released by GoI under Smart Cities Mission (till March 31, 2018)

(Amount in ₹ crores)

State/Union Territory	2015-16	2016-17	2017-18	Total
Andhra Pradesh	380	106	120	606
Andaman & Nicobar Islands	0	194	2	196
Arunachal Pradesh	2	0	18	20
Assam	2	189	5	196
Bihar	6	63	166	235
Chandigarh	2	71	123	196
Chhattisgarh	4	94.5	135.5	234
Daman and Diu	0	0	0	0
Dadara & Nagar Haveli	0	2	0	2
Delhi	2	194	0	196
Goa	2	0	110.2	112.2
Gujarat	12	388	163	563
Haryana	4	92	119	215
Himachal Pradesh	2	188	24	214
Jharkhand	2	92	102	196
Jammu & Kashmir	0	2	36	38
Karnataka	12	388	436	836
Kerala	2	194	18	214
Lakshadweep	0	0	18	18
Madhya Pradesh	386	394	240	1020
Maharashtra	20	818	558	1396

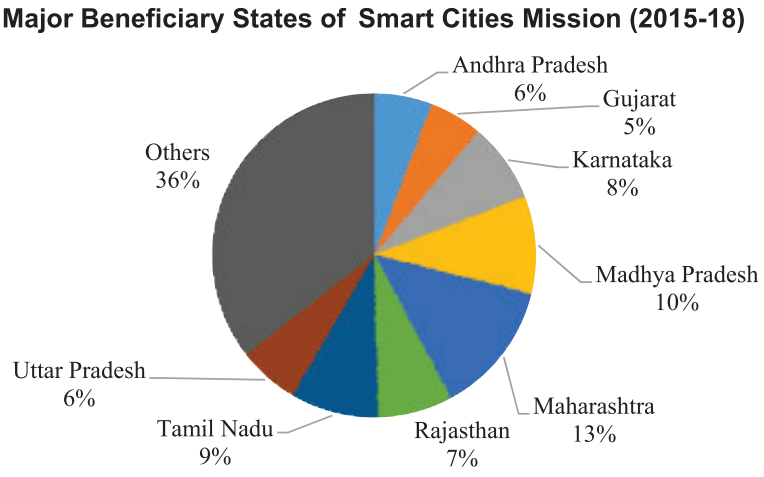
Manipur	2	0	109	111
Meghalaya	2	0	0	2
Mizoram	2	0	0	2
Nagaland	2	0	109	111
Odisha	192	6	188	386
Puducherry	2	0	98	100
Punjab	6	194	54	254
Rajasthan	353.2	225.8	205	781
Sikkim	2	0	126	128
Tamil Nadu	24	376	520	920
Telangana	4	92	18	104
Tripura	2	63	131	196
Uttar Pradesh	24	62.2	547.8	634
Uttara Khand	2	0	18	20
West Bengal	8	0	18	26
Total	1467.2	4492.5	4499.5	10459.2

Source: Drawn on data sourced from http://smartcities.gov.in/upload/uploadfiles/files/Fund%20released%20status%20till%2031%20March%202018.pdf

From Table 2, it can be stated that the leading states in fund allocation under the mission are Maharashtra (₹ 1396 crore), Madhya Pradesh (₹ 1020 crore), Karnataka (₹ 836 crore), Rajasthan (₹ 781 crore), Uttar Pradesh (₹ 634 crore), Andhra Pradesh (₹ 606 crore), and Gujarat (₹ 563 crore). There has been a continuous rise in allocation of funds since 2015. The budgetary allocation jumped by 54 per cent from ₹4499.5 crores in 2017–18 to ₹6166 crores in 2018–19[2]. This indicates that urbanization is currently a priority for the central government.

[2] https://www.hindustantimes.com/india-news/union-budget-2018-54-hike-for-smart-city-mission-amrut-loses/story-E6mRMlpX6BB2avoj1sEwHK.html

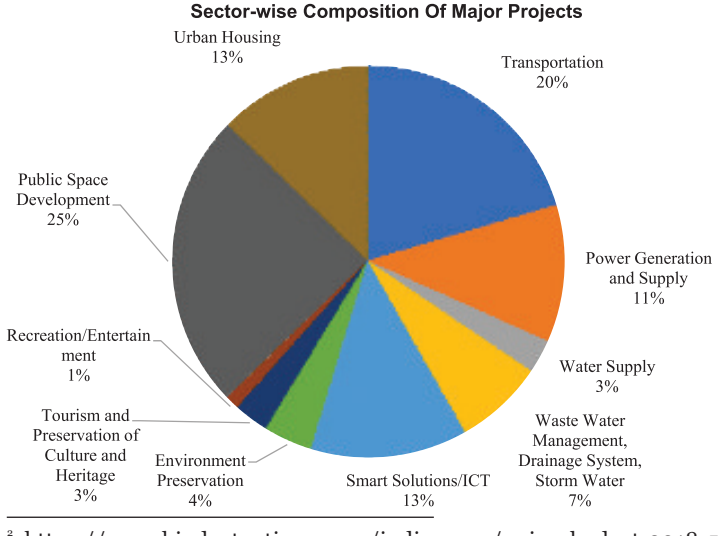
Figure 1: Funds Released by GoI under the Smart Cities Mission (till 31st March, 2018)



Source: Drawn on data sourced from http://smartcities.gov.in/upload/uploadfiles/files/Fund%20released%20status%20till%2031%20March%202018.pdf

Eight major beneficiaries have been allocated 64 per cent of total funds transferred by the central government during 2015–18 (Figure 1). It can be concluded that the mission would accelerate the process of urbanization in all those states that are already relatively urban. The biggest disadvantage would be to those states that are primarily rural in nature. It would arguably create regional imbalances. The southern states got a lion's share whereas the north eastern states received insignificant funds.

Figure 2: Sector-wise Composition of Major Projects under the Smart Cities Mission



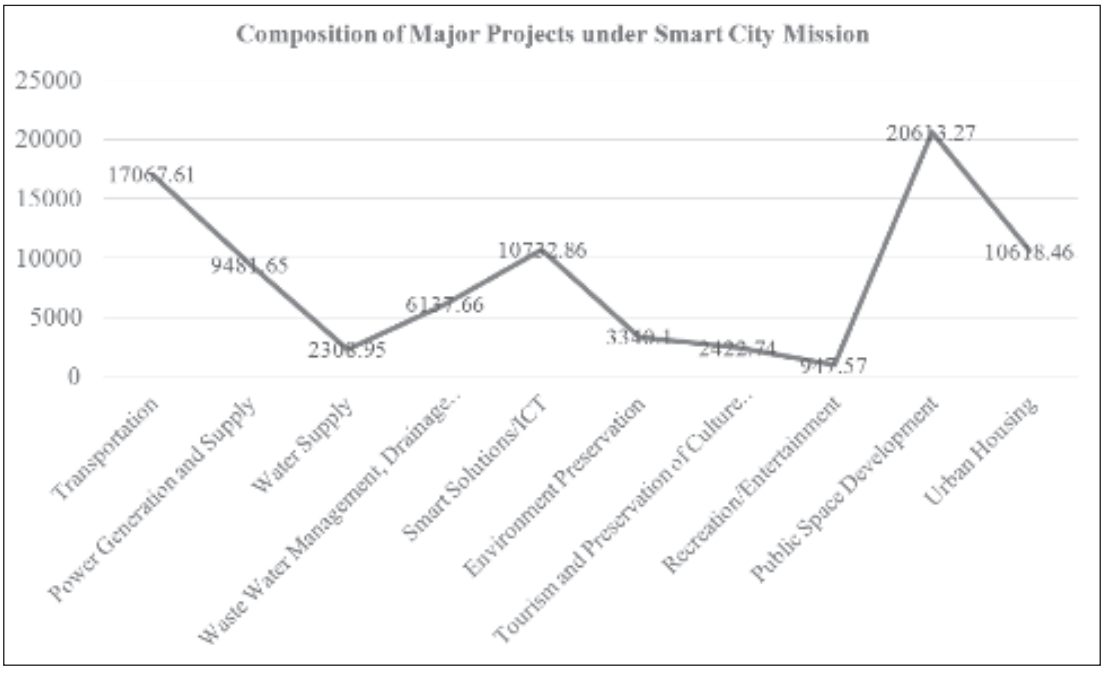
Source: Drawn on data sourced from the official website of smart cities of India[3]

[2] https://www.hindustantimes.com/india-news/union-budget-2018-54-hike-for-smart-city-mission-amrut-loses/story-E6mRMlpX6BB2avoj1sEwHK.html

From Figure 2, it can be stated that out of 329 projects with values greater than ₹100 crores, development of public spaces (25%), transportation (20%), urban housing (13%), smart solutions (13%), and power generation (11%) collectively form around 80% of the total investment under the Smart Cities Mission. Investments in transportation include BRT, metro train, electronic vehicles, and space for pedestrians and cyclists. Urban housing predominantly involves providing affordable housing facilities for the poor, to convert cities free from slums. Investments in rooftop solar plants form a major share of the power generation objective under the project. There is state investment in ICT aimed at finding out smart solutions to urban problems related to traffic, water supply, drainage, and surveillance. Recreation, entertainment, environment conservation, and water supply have failed to attract investments under major project categories.

Figure 3: Investments in Major Projects of Smart Cities Mission

(Amount in ₹ crores)
(Projects worth more than ₹100 crore)



Source: Drawn on data sourced from the official website of smart cities of India[4]

[4] https://smartnet.niua.org/sites/default/files/resources/List_of_Projects_OpenSpaces_Riverfront.pdf

In terms of absolute investments, public space development (₹20613.27 crores), transportation (₹17067.61 crores), smart solutions (₹10732.86 crores), urban housing (₹10618.46 crores), and power generation (₹9481.65 crores) were priority sectors for major projects under the mission (Figure 3).

SELECTED SMART CITIES FROM GUJARAT

Gujarat has about one third of its population living in cities. In addition to several small towns, Ahmedabad, Surat, Rajkot, Gandhinagar, Vadodara, Bhavnagar, Bhuj, and Ankleshwar are important well developed cities from this state. Infocity, Gujarat International Finance Tech (GIFT) City, and Dholera are major extraordinary attractions in Gujarat. For example, GIFT has been conceptualized as a global financial and IT services hub, the first of its kind in India, designed to be at par with, if not above globally benchmarked financial centres such as Shinjuku, Tokyo, Lujiazui, Shanghai, La Defense, Paris, London, and Dockyards, targeting business segments such as financial services, banking, insurance and asset management, IT services, capital markets, and trading ITES (Smart Cities in India).

Table 3: Strengths and Challenges before Smart Cities in Gujarat

City	Strengths of the City	Possible Challenges
Ahme-dabad	• Largest city of Gujarat spread over an area of more than 50 km diagonally , with a population of more than half a billion • A major centre for commerce and trade • Formerly dubbed as Manchester of the East, major manufacturing hub for automobile, chemical, textile, pharmaceutical, and other industries • BRTS and AMTS as local public transports • Historically important city • Excellent internet and communication facilities • Presence of institutions of repute such as National Institute of Design, Physical Research Laboratory, Indian Institute of Management, Indian Space Research Organization, Science City, Gandhi Ashram	• Rehabilitation of project affected people • Non availability of land in the outskirts of the city for various purposes • Too many vehicles on roads • Waste management • Lack of traffic discipline among people • Roadside shops and vendors • Too much encroachment on roads • High real estate prices

Gandhi-nagar	• Highly planned and lush green city with only limited encroachments on roads • Well connected by roads, broad , and well maintained roads • Mahatma Mandir, Akshardham temple are local attractions • Highly ambitious 'Gujarat International Finance Tech City' (GIFT) Project is commissioned at Gandhinagar • The software technology Park of India (Gandhinagar) is located here. • An education hub housing several institutions of repute such as Indian Institute of Technology, Gujarat National Law Univers ity, Central University of Gujarat, PDPU University, National Institute of Fashion Technology, Gujarat Forensic Science University, Dhirubhai Ambani Institute of Information and Communication Technology, etc. • Small and manageable size of the city • Proposed Metro Train project will improve connectivity with Ahmedabad	• Digital literacy is lower • Fewer employment opportunities • Limited industrialization • Commercially not so developed
Surat	• Stands among top 10 biggest urban agglomerates in India • Dominates in dia mond, textile, chemical, oil and gas industries • Port city of Hazira • Important centre of trade and commerce • Recently developed flyovers on roads have improved traffic in the city • Well-developed skyline	• Lack of cleanliness leads to frequent epidemics • Overflow of river Tapi causes loss of life and property on a regular basis due to floods • Too many slums • Too much encroachment on roads • High real estate prices • Pollution • Limited number of good educational institutes
Vadodara	• Gateway to the Golden Quadrilateral; an important link city for railway connectivity • Houses the reputed M. S. University • Chemical, textile, petro chemicals, plastic, fertilizer, and engineering industries are well developed ones • Knowledge City • IT hub • Cultural capital of Gujarat	• Higher crime rate • Communal riots • Pollution • Slums and poverty

Rajkot	• Largest centre of trade and commerce for the entire Saurashtra region of Gujarat • Houses institutions of repute such as Saurashtra University, Raj Kumar College, • Submersible pumps and diesel pumps, plastics, automobile parts, and other similar industries are well developed here • Large presence of small and medium enterprises	• High real estate prices • Lower digital literacy • Fewer employment opportunities as compared to Ahmedabad and Surat
Dahod	• Strategically important for bordering Gujarat with Rajasthan and Madhya Pradesh • Well connected with road and rail system • The Agriculture Produce Marketing Committee (APMC) in Dahod for vegetables, grains, and oilseeds, stands at the top among all of Gujarat's APMCs • Chemical, rubber, handicraft paper and paper products, and mineral based industries are present	• Poor quality roads • Lack of basic infrastructure • Limited investment in industries • Civic concerns • Low level of digital literacy • Social and religious rigidity in the tribal dominated city • Poverty

Sources: Drawn on data and information obtained from relevant sources including newspapers, government websites, and the author's own experience in the city.

Six cities of Gujarat, namely, Ahmedabad, Surat, Vadodara, Rajkot, Gandhinagar, and Dahod have been awarded to be developed as smart cities under the mission (Table 3). Looking at the geographical allocation of these cities, it indicates a fair balance between all regions of the state. Gujarat is likely to get a grant of ₹2000–3000 crores from the Centre in addition to ₹100 crore for each smart city identified from the state. However, the total amount released by the central government during 2015–2018 have been a meagre ₹563 crores. Each of the selected cities have formulated a Special Purpose Vehicle (SPV) [5].

[5] http://smartcities.gov.in/content/spvdatanew.php

Table 4: Release of Funds by GoI under Smart Cities Mission (Amount in ₹ crore)

Name of City	2015–16	2016–17	2017–18	Total
Gandhinagar	2		18	20
Ahmedabad	2	194		196
Surat	2	194		196
Vadodara	2		109	111
Rajkot	2		19	21
Dahod	2		17	19
Total	12	388	163	563

Source: Drawn data sourced from the official website of smart cities of India[6]

From Table 4, it can be seen that like every smart city selected in India, six cities from Gujarat were provided ₹2 crores each as seed money in 2015–16, to prepare a blue print or roadmap for their development for the next five years However, only Ahmedabad and Surat could receive funds worth ₹194 crore each. The other cities from Gujarat collectively received ₹163 crores in the following year. In the five year mission, all six cities were collectively financed projects worth ₹563 crores. It can be observed that the release of funds from the centre has not been regular. As a result of this, these cities need to explore new avenues to finance their ambitious projects. Additionally, the meagre size of funds available for the mammoth projects prolongs the process of development of these cities.

Table 5: Investment in Major Projects in Smart Cities of Gujarat (Amount in ₹ crores)

Name of City	Transportation	Power Generation and Supply	Water Supply	Waste Water Management, Drainage System, Storm Water management	Smart Solutions /ICT	Public Space Development	Urban Housing
Ahmedabad	225	50	50	175	962	35	451
Surat			178	455	676	210	500
Vadodara	125.6	122.5				785.9	260
Total	350.6	172.5	228	630	1638	1030.9	1211

Source: Drawn on data sourced from the official website of smart cities of India [7]

[6] http://smartcities.gov.in/upload/uploadfiles/files/Fund%20released%20status%20till%2031%20March%202018.pdf

[7] https://smartnet.niua.org/sites/default/files/resources/List_of_Projects_OpenSpaces_Riverfront.pdf

From Table 5, it is evident that only Ahmedabad, Surat, and Vadodara from Gujarat have been awarded with major projects between 2015–16 and 2017–18. Of the total funds allocated, ₹5261 crores have been given to smart cities in Gujarat — smart solutions (₹1638 crores), urban housing (₹1211 crores), public space development (₹1030.9 crores), and drainage system (₹630 crores) were important sectors that received the lion's share. This amount is quite insignificant to the financial requirements of the identified projects in the six cities of Gujarat. Interestingly, Gandhinagar, Rajkot, and Dahod failed to get funds in the category of projects worth more than ₹100 crores. This does not mean that the requirement for is less in these areas. This limited availability of funds could eventually lead to a slowdown in the progress of existing projects.

Table 6: Investment in Smart Cities of Gujarat under the PPP Model

(Amount in ₹ crores)

Name of City	Smart Card Payment System	Slum Rehabilitation, Affordable Housing	Centralized Command & Control Centre	Waste Processing & Reuse	Transport	Smart Parking	Total
Ahmedabad	84	385			125		594
Surat	110	460	20	5		420	1015
Total	194	845	20	5	125	420	1609

Source: Compiled by the author based on data sourced from https://smartnet.niua.org/sites/default/files/resources/PPP-Projects.pdf

From Table 6, it can be observed that Ahmedabad and Surat have been able to mobilize funds worth ₹1609 crores for the Smart Cities Mission under the Public Private Partnership (PPP) model. The participation of private sector entities in slum rehabilitation and affordable housing has been the highest, followed by smart parking, and smart card payment system. However, both cities need to mobilize much more to realize the mission. Moreover, other cities have not been as successful. Dahod would need additional financial assistance for its crucial projects under the mission.

1. Ahmedabad

A Mega City since 2005 and a World Heritage City[8] since 2017, Ahmedabad with a population of 5.6 million people (2011), spread across an area of 466.06 sq. km is the seventh most populated city in India. Once nicknamed as the 'Manchester of the East', Ahmedabad is predicted to be among the top 20 cities that are likely to be recognised as the hot spots of growth in the world by 2025 (McKinsey Global Institute, April 2010). The Ahmedabad Municipality, having been established in 1873, has rich experience in local administration, while the Ahmedabad Municipal Corporation, having been established in 1950 has evolved its functioning with evolving times, and made this city a front runner in the Smart City Project. The semi-urban outskirts of Ahmedabad were brought under the Ahmedabad Urban Development Authority (AUDA) in 1978. The Ahmedabad Municipal Transport Service (AMTS) since 1947, and Janmarg Bus Rapid Transit (BRT) System are being run by the Ahmedabad Municipal Corporation. The Bus Rapid Transport System (BRTS), the Sabarmati River Front Project, re-development of Kankariya and Vastrapur lakes, development of Science City, and repair of the Kali Bhadra Fort and Sarkhej Roja are remarkable efforts that are likely to expedite the pace of development of Ahmedabad as a smart city. The city can boast of its quality health and education facilities that benefit people even from neighbouring states. Ahmedabad Traffic Management and Information Control Centre under dual programs, namely, Traffic Management and Information Control Centre (TMICC), and National Urban Transport Helpline (NUTH) of the Ministry of Urban Development of the Government of India provide Intelligent Transport Systems (ITS) that focus on management of traffic systems and dissemination of transport related information respectively (GoI, 2016:10). The Urban Resource Centres[9] (URCs) as a platform were set up in 2008 jointly by an NGO, SAATH, and the AMC to link service users and service providers

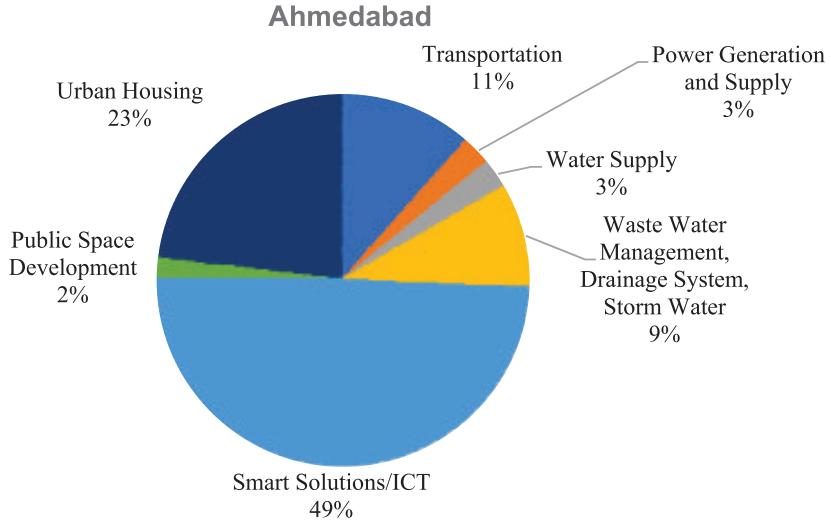
Under 'India Smart Cities Award' 2018, Bhopal and Ahmedabad were selected in the 'Innovative Idea' category for their "transformative approach towards sustainable integrated development (Financial Express, June 20, 2018). In addition to this, AMC has received numerous awards, both, at national and international levels for its achievements in slum networking, transportation, water supply, and e-governance[10].

The proliferation of informal and illegal forms of access to urban land and housing has been one of the main consequences of the processes of social exclusion and spatial segregation characterized as part of intensive urban growth in the city (Joshi and Sanga, 2009:15). Bhatt (2003:5) observed that the eastern part of the agglomeration periphery of Ahmedabad is a

[8] https://indianexpress.com/article/india/ahmedabad-becomes-indias-first-world-heritage-city-unesco-site-indians-first-4742234/
[9] https://saath.org/saath-institutional-partners/saath-livelihood-services/urban-resource-centre/#
[10] https://ahmedabadcity.gov.in/portal/jsp/Static_pages/amc_awards.jsp

predominantly industrial zone having a concentration of small-scale industries in the industrial estates that came up during the decades of seventies and eighties; these industries employ a large number of unorganized workers who stay in low income dwellings there, which lack basic facilities and essential amenities.

Figure 4: Sector-wise Composition of Projects of the Smart Cities Mission in Ahmedabad (More than ₹ 100 crores)



Source: Drawn on data sourced from the official website of smart cities of India[11]

Figure 4 shows the total investments made as major projects under the Smart Cities Mission in Ahmedabad amount to ₹ 2048 crores, which include allocation of money to smart solutions (49%), urban housing (23%), transportation (11%), waste water, drainage and storm water management (9%) public space development (2%), power supply (3%), and water supply (3%).

2. Gandhinagar

Gandhinagar is a vibrant and future ready city that provides good quality of life to its citizens by providing sustainable infrastructure and services, through a confluence of physical and digital realms[12]. Gandhinagar has a population of a little more than 0.2 million (Census, 2011). It has planned urban infrastructure[13]. The Gandhinagar Municipal Corporation (GMC) is preparing a Smart City Proposal (SCP) for Gandhinagar that will include Smart City Solutions derived primarily from consultations with its citizens and all the important

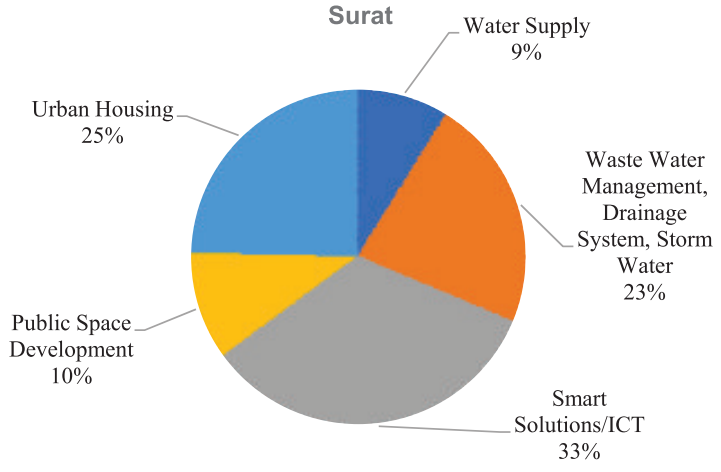
[11] https://smartnet.niua.org/sites/default/files/resources/List_of_Projects_OpenSpaces_Riverfront.pdf
[12] http://smartcities.gov.in/upload/uploadfiles/files/Annexures_Gandhinagar.pdf
[13] https://www.worldwifiday.com/wp-content/uploads/2018/05/Cat-4_Winner_Sterlite-Tech-Content-1.pdf

stakeholders involved in the development process[14]. The Info-City and Gujarat International Tech-Finance (GIFT) city developed in during last decade are the biggest strengths of Gandhinagar. Because Gandhinagar is manageable in size in terms of both, its population and geographical spread, the herculean task of developing it into a smart city is likely to get accomplished in a very short time frame.

3. Surat

Like Ahmedabad, the city administration of Surat is in the hands of the Surat Municipal Corporation since 1966. Smart Utilization of Surat city's potential for enhancing the quality of life for its citizens by providing equal access to best quality physical infrastructure, social infrastructure, and mobility through leveraging state of the art technology, could make Surat a futuristic global city with focus on enhancing the economy, protecting the ecology, and preserving the identity and culture of the city[15]. It is the second largest city of Gujarat, after Ahmedabad, both, in terms of population (4.5 million in 2011) and area. Its strategic location near important cities like Bharuch, Ankleshwar, Vapi, and Mumbai, has likely encouraged the government to develop it into a smart city. This city has emerged as the diamond industry hub for the whole world over the decades. Surat's chemical, textile, and oil and gas industries make it a strong manufacturing hub. Surat has been awarded for showcasing 'great momentum' in the implementation of projects under the Smart Cities Mission (Financial Express, June 20, 2018).

Figure 5: Sector-wise Composition of Projects of the Smart Cities Mission in Surat (Projects worth more than ₹ 100 crores)



Source: Drawn on data sourced from the official website of smart cities of India[16]

[14] https://www.mygov.in/group-issue/smart-city-gandhinagar/
[15] http://www.suratsmartcity.com/SuratSmartCity/SmartCityVision
[16] https://smartnet.niua.org/sites/default/files/resources/List_of_Projects_OpenSpaces_Riverfront.pdf

Figure 5 shows the total investments made towards major projects under the Smart Cities Mission in Surat amount to ₹ 2019 crores, spread across smart solutions (33%), urban housing (25%), waste water, drainage, and storm water management (23%), public space development (10%), and water supply (9%).

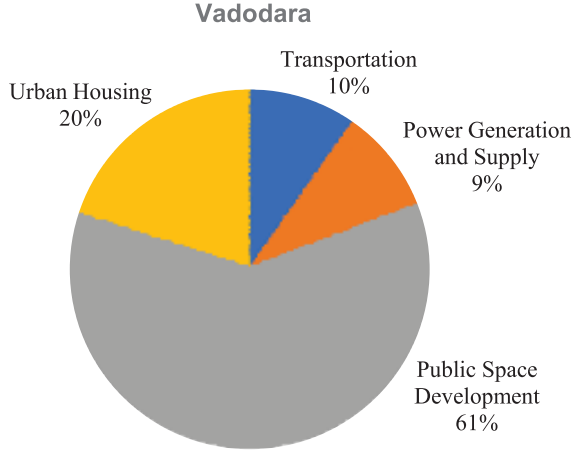
4. Rajkot

Rajkot is known as Rangilu Rajkot after its lively populace; it is quite suitable for selection as one of the candidates for the '100 Smart Cities' agenda. A peaceful environment, rich cultural programmes, and well-behaved residents are factors that are likely to help Rajkot in excelling as a smart city.

5. Vadodara

Vadodara city, ranking 20th in the country for its population of 1.7 million residents (Census, 2011), has a municipal corporation since 1951. Vadodara is rich in cultural heritage, and is also the educational capital of Gujarat. Because of its relatively smaller size, and lower population, Vadodara is likely to be quite manageable. It fulfils all the requirements of a successful smart city. The Smart City Mission aims at making Vadodara a sustainable and clean city with an efficient, sophisticated, skilled, and people centric administration offering best quality services to its citizens. Vadodara ranks second among 98 cities for progress in public private partnership projects associated with the smart cities mission of the Union Ministry for Housing and Urban Affairs (Economic Times, 2018).

Figure 6: Sector-wise Composition of Projects of the Smart Cities Mission in Vadodara (Projects worth more than ₹ 100 crores)



Source: Drawn on data sourced from the official website of smart cities of India[17]

[17] https://smartnet.niua.org/sites/default/files/resources/List_of_Projects_OpenSpaces_Riverfront.pdf

Vadodara has six major projects under this mission, among which, public space development (61%), urban housing (20%), transportation (10%), and power generation and power supply (9%) remain the priority sector. However, the total amount allocated to Vadodara city for all these projects is a meagre ₹ 1293.4 crores. *(Figure 6)*.

6. Dahod

Dahod is the largest tribal city of Gujarat. In order to make Dahod a smart city, the government would need to do a total revamp on several fronts. Dahod's strengths stand shorter than its weaknesses in terms of physical and social infrastructure. But, with proper planning and right implementation, the task at hand could become a little easier. Dahod's advantage is its small and manageable size in terms of area and population.

CHALLENGES BEFORE THE SMART CITIES MISSION

The Smart Cities Mission is likely to have multiple challenges. India struggles with a number of significant barriers that continue to hamper the development of urban infrastructure: complex leadership structures, land valuation challenges, capability gaps, and funding shortfalls are all part of the urban challenge that is effectively holding India back from a new round of dramatic economic growth. Byahut (2005), who has worked as a consultant on several development projects for cities in Gujarat, assigns key reasons for urban planning not being successful in Indian towns and cities. These include: poor quality of the ûnal product; non-implementable proposals; no integration of plan proposals in municipal budgets; and, delays in plan implementation. Smart cities are citizen centric zones aimed at improving the quality of life of people. It is most likely that the implementation of the Smart Cities Mission will improve public delivery, governance, public safety, access to education and health services for all, and law and order conditions. But, this will not be a smooth road for the Smart Cities Mission. The main areas of concern related to smart cities are likely to be land acquisition, environmental pollution, quantum of investment, availability of online public services, digital illiteracy among people, corruption, and infrastructural bottlenecks.

The cost of the smart part of the city is an addition to the basic cost of living, which needs to be addressed to make it affordable for a smart city concept to be meaningful (Vadgama et al., 2015). Identifying usable land, and acquiring land from slums dwellers and farmers on the outskirts of cities for different purposes, will not be an easy task. A majority of the people are not digitally literate; therefore any online service will not be effective unless people become tech savvy. Environmental hazards due to rapid urbanization and industrialization could act as pull down factors. The real challenge before the Government is to build inclusive smart

cities for all its residents, regardless of whether they are rich or poor[18]. Unless cities build up world class infrastructure for water supply, drainage, internet, and public transport, the concept of smart cities cannot become a reality. Even if the government is positively motivated to make cities smart, it would not be possible to accomplish this in a short time due to non-availability and unreliability of data on a variety of variables that are needed to find out smart solutions to urban problems.

Excellent infrastructure equipped with the latest technology will scoop investments in favour of select smart cities in the near future. However, with limited availability of urban development funds, other cities will find it difficult to finance their own projects. With ever expanding large cities, sustainability of smart cities will continue facing urban challenges.

A major obstacle to providing adequate urban infrastructure of good quality is the requirement of huge amounts of financial resources; and most committees on infrastructure finance are unanimous about enhancing spending on urban infrastructure as percent of the GDP (Kumar, 2017). Looking at the budgetary requirements for developing infrastructure in 100 cities under the Smart Cities Mission, five years is too short a time period to accomplish everything. As of now, according to Vadgama et al. (2015), there is no clarity on central and state government funding for infrastructure development under the Smart Cities Mission for the long run. However, it appears that private investments or Public Private Partnerships would play a significant role in the years to come. It is yet unclear how the complete portfolio of the credits will be put into action. If the state in the developing world fails to manage growing cities, it will result into diseconomies of scale and eventually lead to everlasting challenges for the cities (McKinsey Global Institute, 2012).

Challenges related to technologies, building, utilities, transportation, and road infrastructure are common issues that cities gunning to become smart cities, will have to deal with. The big challenge will be to create self-sustaining cities, which create jobs, use resources wisely and also train people[19]. Development of smart cities in India would require large investments for acquiring better technology, latest machines, digital tools, and quality infrastructure on a long term basis. Further investments would be required to build good roads and local rail networks, to construct a world class ICT network, and to open help centres or kiosks all around the city for providing real time information round the clock. As per McKinsey Global

[18] http://www.sesei.eu/wp-content/uploads/2018/08/Report-on-Smart-Cities-Mission-in-India_July_2018_Final.pdf

[19] http://www.sesei.eu/wp-content/uploads/2018/08/Report-on-Smart-Cities-Mission-in-India_July_2018_Final.pdf

Institute Report (2010) titled 'India's Urban Awakening', in transportation alone, India needs to build 350 to 400 kilometres of metros and subways every year, at a 20 times faster rate as compared to the average speed of the past decade. In addition, between 19,000 and 25,000 kilometres of roads would need to be built every year; this figure is almost equal to all the roads constructed in India over the entire past decade. In this report, it is further predicted that a capital investment of US $1.2 trillion would be required to meet the projected demand for 590 million people living in Indian cities. A fair balance in investment would be a prime requirement for the development of a smart city.

The biggest possible challenge that the smart cities would face would be the problem of handling too much of data at a time for various reasons, chaos in case of data loss and data theft, and collapse of servers managing the smart cities. The government will have to appoint technicians, professionals, engineers, and legal experts in order to deal with the herculean task of building and managing the smart cities. There will be too much government control on citizens' behaviour. The privacy of citizens will be at risk. The government will keep a close watch on consumption habits of people and this may eventually lead to emergence of new taxes on the people. Indian cities are characterized by their dualistic nature; so are their Gujarati counterparts. For example, on one hand there are sky rocketing towers dominating the skyline of the city, while on the other hand several unauthorized slums have also come up. People still use bullock carts despite the existence of metros, trains, and BRTS in the city. Protection of environment during the process of development, environmental awareness among people, check on water and air pollution, and strict controls on multiplication of unauthorized and haphazardly built commercial buildings and housing colonies, would also be a major challenge before any smart city in India.

Patel et al. (2009:182) identified inefficient urban land management system (records, maps, and data sharing across administrative authorities) as an important planning problem in need of major reforms. The Greenfield financing is seen as a good option to raise majority with Floor Area Ratio and subsidization for the utilizations (Vadgama et al., 2015). By 2030, Ahmedabad, Surat, and Vadodara will be among those 13 cities that have a population of over 4 million in India (McKinsey Global Institute, 2010). Except Gandhinagar, the other five cities from Gujarat selected under the Smart Cities Mission have been developed in a haphazard manner. Mahadevia (2010:236) is of the view that for Ahmedabad, financial sustainability, building a democratic culture, equitable resource allocation, and now the emerging problem of erosion of local autonomy are important. The newly developed outskirts of each city lack in basic amenities, and the drainage system is not a well-developed one. Encroachment on roads is a major challenge in urban Gujarat. Absence of an adequate

housing policy coupled with the land market dynamics force the urban poor to create their own shelter by encroaching upon the vacant land to construct their own housing (Joshi and Sanga, 2009). The government has to develop its infrastructure as per the requirements of a smart city. Migrants from different states add to the expansion of slums to an extent. If cities fail to invest in a way that stays abreast of the rising needs of their growing population, they may lock in inefficient and costly practices that will become constraints to sustained growth later on (McKinsey Global Institute, 2010).

Mahadevia (2010:30) observed that the Gujarat Housing Board (GHB) and the now defunct Gujarat Slum Clearance Board (GSCB) were never very active in the city. However, of late under the Pradhan Mantri Awas Yojana and Mukhya Mantri Awas Yojana[20], efforts are being made to provide houses to slum dwellers Land acquisition under development projects is increasingly becoming difficult in Gujarat[21]. But, the Chinese government has promised in principle to the Government of Gujarat, an investment of ₹ 19,000 crores towards the development of smart cities in Gujarat, through China Small and Medium Enterprise Investment Ltd. (CSMEI). (Times of India, 17 May 2015).

CONCLUDING OBSERVATIONS

The Smart Cities Mission is a monumental task to be accomplished. However, looking at the inadequate financial allocation, sluggish progress of work, and unpreparedness of cities in implementation of the mission in both letter and spirit, it can be concluded that the objectives of this mission will not be so easily achieved by 2020. Difficulty in mobilization of adequate funds and in timely acquisition of land are notable critical areas for the mission. Small cities are struggling hard to mobilize funds for their projects.

From the available data, it is difficult to estimate objectively as to how much the projects under the smart cities mission have contributed towards economic growth in the country. Neither is it easy to carry out its impact assessment on income and employment of people. Even though affordable housing schemes are coming up sporadically across the country, the supply is likely to considerably fall short of the demand for several years to come. Application of ICT in traffic management, digital payment, surveillance, and governance has become universal. However unreliable power supply, lack of uninterrupted internet services, and digital illiteracy will continue to daunt the stakeholders when it comes to realizing the vision of the mission.

[20] http://www.udd.gujarat.gov.in/GRUHYojna.php

[21] https://timesofindia.indiatimes.com/city/ahmedabad/New-land-acquisitions-in-Gujarat-put-on-hold/articleshow/28567735.cms

It would not be an exaggeration if one states that only certain areas of each city are growing smart. In other words, there would be islands of smart cities in the ocean of urban India. The diversion of funds for smart cities is likely to create a deficiency of funds for other cities which eventually would lead to inequalities of development within cities. Moreover, migration to smart cities would be much faster than to non-smart cities, consequently leading to greater demographical pressure on the former.

POLICY RECOMMENDATIONS

To prevent the growth of slums, there is a need to understand and identify the factors that have contributed to the phenomena of urban illegality and emerging informal markets of housing and service provision (Joshi and Sanga, 2009). Adhvaryu (2011) is of the view that any master plan for development for a city needs to look at the past trends of jobs, both in terms of sectors and their spatial distribution. Bhattacharya, et al. (2015:52) recommended the constitution of an expert group on smart cities at the national level, supplemented by expert groups at state levels. Each selected smart city needs to have its own expert group that comprises of top officials from the municipal authorities, demographers, urban planners, environmentalists, and research scholars.[1]

S. Praharaj et al. (2018:41) observed that cities are often caught between directives of the central government, a strong presence of state-level parastatal organisations, and various planning and strategic documents prepared by state and city level agencies, that not only lack integration, but also often present overlapping or conûicting visions. Different development programmes that are closely connected to smart cities need convergence that would eventually reduce overlapping and duplication of work. Based on her study of Bangalore, Patna, and Ahmedabad, Mahadevia (2010:274) suggested that cities and states should be given greater flexibility for better implementation of reforms. For success of the Smart Cities Mission in India, Aijaz (2016:29) made important suggestions that included adequately empowering civic authorities in project implementation and enforcement of law, strengthening manpower, financial and technical capabilities of traditional local urban institutions, collaboration of centre, state, and local self-governing bodies, engagement of NGOs, efficiently addressing citizen centric urban problems, and greater funds allocation for capacity building of educational institutions. S. Praharaj et al. (2018:42) have strongly recommended that the state level urban development agencies delegate functions of local utility planning and management to municipal governments, and the former rather lay its focus on setting state level policies, benchmarking of cities' performances, and on creating an enabling environment for public private partnerships.

The government should prepare a vast database on relevant economic variables and the demographic profile of each city chosen under the Smart Cities Mission. The local municipal authority can issue identity cards such as Aadhar card in order to ensure a foolproof delivery of public services. The government should appoint IT professionals, legal experts, financial consultants, surveyors, and engineers on an urgent basis. They should be trained thereafter in handling and using big data of citizens, and in maintaining and repairing of advanced machines and technology. The central government in consultation with the concerned state government and local self-government should prepare a vision document for each city. The vision document would be a roadmap or blue print detailing several aspects of the smart city including total investment and land required. The government should leave room to accommodate any improvement needed at any point of time. Innovation for betterment should become an integral part of the vision and mission of the programme. The central government should directly supervise the progress of the smart city technically, financially, and environmentally at its different stages of development. Regular and constant handholding and capacity building would be required in the initial stages.

The central and state governments which provide the bulk of development funds have greater control in project approval, monitoring, and funds release, so the municipal government does not have adequate manpower or requisite legal jurisdiction to undertake development through special purpose vehicles. This creates the need for effective co-ordination mechanisms and simpliûcation of governance procedures (S. Praharaj et al., 2018:41).

The Government should build at least the basic physical and social infrastructure as fast as possible and make it operational as early as possible. The town planning schemes in Gujarat have proved to be successful instruments in reserving lands for infrastructure projects, and the same can be used effectively to allocate lands for the poor (Joshi and Sanga, 2009). Adhvaryu (2011) is of the view that compact urban development is one of the possible conûgurations of an alternative urban policy. The Government should draft a clear cut, fair and just land acquisition policy. Such a of policy may be allowed to differ from city to city and state to state in order to accommodate to and adjust with the local complexities of each area. The government should see to it that the implementation of the Smart Cities Mission remains completely corruption free. Each city should not only become a smart city, but also an equitable cityone as well. Protection of the environment and developing environment awareness among people should become an integral part of development of smart cities. A certain amount of tree cover and local bio-diversity need to be maintained. Recycling of waste and solid waste management should become important components of the overall

strategy. Negligence towards development of other cities and diversion of funds away from the rural economy may result in disastrous consequences for the economy as a whole. Progress of smart cities should percolate down to benefit the rest of the economy of the country.

REFERENCES

Adhvaryu, Bhargav (2011). The Ahmedabad urban Development Plan-making process: a critical review, Planning Practice and Research, 26, 229-250, 10.1080/02697459.2011.560463.

Aijaz, Rumi (2016). Challenge of Making Smart Cities in India, ASIE. Visions, No.87, Centre for Asian Studies, October. https://www.ifri.org/sites/default/files/atoms/files/av87_smart_cities_india_aijaz_0.pdf.

Bhatt, Mihir R. (2003) Urban Slums Reports: The case of Ahmedabad, Understanding Slums: Case Studies for the Global Report on Human Settlements. https://www.ucl.ac.uk/dpu-projects/Global_Report/pdfs/Ahmedabad_bw.pdf (Accessed October 5, 2018)

Bhattacharya, Shrimoyee, Sujaya Rathi Sonali Anusree Patro Niepukhrie Tepa, (2015). Reconceptualising Smart Cities: A Reference Framework for India, Centre for Study of Science, Technology and Policy, September. http://www.cstep.in/uploads/default/files/publications/stuff/6b9cb2a72ca68b2c2ab3e98ba4c5e649.pdf (Accessed October 5, 2018)

Byahut, S. (2005). Development Plan Manual, Working Paper (unpublished), Environmental Planning Collaborative, Ahmedabad.

Census of India, (2011). "Trends in Urbanization". http://censusmp.nic.in/censusmp/All-PDF/3Trendsinurbanization21.12.2011.pdf, (Accessed on 19 January, 2016).

Economic Times (2018). "Smart Cities Mission: Vadodara 2nd in PPP projects' progress". https://economictimes.indiatimes.com/news/politics-and-nation/smart-cities-mission-vadodara-2nd-in-ppp-projects-progress/articleshow/64684104.cms (Accessed June 26, 2018)

Financial Express (2018). “Surat bags award for ‘great momentum’ in implementation of Smart City projects”, June 20.
https://www.financialexpress.com/infrastructure/surat-bags-award-for-great-momentum-in-implementation-of-smart-city-projects/1214148/ (Accessed June 25, 2018)

Forbes/ Tech, (2015). “World’s Top 7 Smart cities of 2015: Are Not the Ones You’d Expect”. http://www.forbes.com/sites/federicoguerrini/2015/01/28/worlds-top-7-smartest-cities-of-2015-are-not-the-ones-youd-expect/#2715e4857a0b437074d9419c, (Accessed on 14 January 2016)

Frost, Sullivan (2003). The ‘PAS’ Phenomenon: Revolutionizing Local Wireless Telephony. Frost and Sullivan White Papers, February 24.

GoI (2016). Ahmedabad Traffic Management and Information Control Centre, Operations Document, Ahmedabad TMICC, Ministry of Urban Development, November.

http://www.sutpindia.com/skin/pdf/Ahmedabad_TMICC.pdf (Accessed October 3, 2018)

Joshi, Rutul and Prashant Sanga (2009). Land reservations for the urban poor: The case of town planning schemes in Ahmedabad, Working Paper 4, Centre for Urban Equity, CEPT University, Ahmedabad, December.
https://cept.ac.in/UserFiles/File/CUE/Working%20Papers/Revised%20New/04CUEWP4_Land%20reservations%20for%20the%20urban%20poor%20The%20case%20of%20town%20planning%20schemes%20in%20Ahmedabad.pdf (Accessed September 29, 2018)

Kumar, Ashok (2017). Can the Smart City Allure Meet the Challenges of Indian Urbanization? P. Sharma and S. Rajput (eds.), Sustainable Smart Cities in India, The Urban Book Series, DOI 10.1007/978-3-319-47145-7_2, Springer International Publishing AG 2017, p27.

Livemint (2016). “India launches its urban makeover plan with smart cities”, Jan 29.
http://www.livemint.com/Politics/KY8pnCzuu370FchYHcPBgJ/Names-of-first-20-smart-cities-in-India-to-be-announced-toda.html (Accessed 29 January, 2016)

Mahadevia, Darshini (2010). “Urban Reforms in Three Cities Bangalore, Ahmedabad and Patna”, in Vikram Chand (Edi) Public Service Delivery In India: Understanding The Reform Process, Chapter: 6, Oxford University Press, pp.226-295, January.
https://www.researchgate.net/publication/292987646_Urban_Reforms_in_Three_Cities_-_Bangalore_Ahmedabad_and_Patna.

Smart cities in India
http://www.rvo.nl/sites/default/files/Smart%20Cities%20India.pdf (Accessed on 18 January 2016)

Hindu, New Delhi (2011). "About 70 per cent Indians live in rural areas: Census Report", July 15.
http://www.thehindu.com/news/national/about-70-per-cent-indians-live-in-rural-areas-census-report/article2230211.ece, (Accessed on 9 January, 2016).

McKinsey Global Institute (2011). "Urban World: Mapping the Economic Super Power of Cities", March.
http://www.mckinsey.com/insights/urbanization/urban_world (Accessed on 18 January, 2016)

McKinsey Global Institute (2010). "India's Urban Awakening: Building Inclusive Cities, Sustaining Economic Growth", April.
http://www.mckinsey.com/insights/urbanization/urban_awakening_in_india. (Accessed on 18 January, 2016)

McKinsey Global Institute (2012). "Urban World: Cities and the Rise of Consuming the Class", June.
http://www.mckinsey.com/insights/urbanization/urban_world_cities_and_the_rise_of_the_consuming_class, (Accessed on 18 January, 2016)

Patel, B., Ballaney, S., Koshy, C.K. & Nohn, M. (2009) Reforming urban land management in Gujarat, in IndiaInfrastructureReport2009:Land–A Critical Resource for Infrastructure, pp. 176–189 (New Delhi: Oxford University Press).

Praharaj, Sarbeswar, Jung Hoon Han, Scott Hawken (2018). Urban innovation through policy integration: Critical perspectives from 100, smart cities mission in India, City, Culture and Society 12, pp.35–43.
https://reader.elsevier.com/reader/sd/pii/S1877916617301273?token=45D7D757AAF9F388CE2A13EE4C03FE4925CF23946F89CDD73DE82C08F516B3626F05C31CC12C79590404942A235B8E9E

Pratap, Kumar V. (undated), Financing of Smart Cities, Economic Adviser, Ministry of Urban Development Government of India.
http://smartcities.gov.in/upload/uploadfiles/files/Financing%20of%20Smart%20Cities.pdf (Accessed October 6, 2018)

Times of India (2015), Ahmedabad, 17 May.
http://smartcities.gov.in/writereaddata/What%20is%20Smart%20City.pdf (Accessed on 13 January, 2016)

Times of India (2016), "Ahmedabad, Surat, 18 others make the cut for smart cities", Ahmedabad, 29 January.

"Urban India 2011: Evidence" (2012). Indian Institute of Human Settlements, 21 January. http://iihs.co.in/wp-content/uploads/2013/12/IUC-Book.pdf, (Accessed on 25 January, 2016)

Vadgama, Chintan, Aditi Khutwad, Madhavi Damle and Sunil Patil (2015), Smart Funding Options for Developing Smart Cities: A Proposal for India, Indian Journal of Science and Technology, Vol 8(34), DOI: 10.17485/ijst/2015/v8i34/85418, December.
http://www.indjst.org/index.php/indjst/article/view/85418/65635 (Accessed October 3, 2018)

Impact of Fiscal Discipline on Public Expenditure and National Income of India

Dhyani Mehta*

Faculty, Institute of Management, Nirma University, Ahmedabad.

1. INTRODUCTION:

Economic planning in a mixed economy like India is different from any other socialist country, implying the co-existence of public and private sector entities. In a mixed economy, the state takes the initiative by spending in those areas where the private sector is unable to spend, or indifferent to the social benefits that can be derived by such spending. In country like India, the state accords very high priority to the development of infrastructure. Spending towards the development of infrastructure like roads, railways, construction of water channels, and production of energy helps in rapid economic development. The state also helps in building a social overhead capital for the private sector to raise its output. However, the state cannot rely upon the private sector for the development of basic industries; following the Mahalanobis strategy of development, the state accords a high priority to large-scale basic industries. Thus, public expenditure is one important growth driver of any economy. Economic growth must be sustained for a developing economy to address issues like unemployment, poverty, and inflation.

In the system of indicative planning, expansionary fiscal policy is used as an instrument for development. Increased expenditure leads to a fiscal imbalance — this gap between government revenue and expenditure, which is sought to be filled by deficit financing. In India, the need for deficit financing arises because of the government's failure to mobilize the desired volume of surplus, and because of increasing expenditure (mostly non-developmental expenditure) (Chaudhuri, 1978). This deficit creates inflationary pressure in the economy because of a high propensity to consume, various market imperfections, low production capacity in plants, and insufficient equipment. (Meier & Baldwin, 1978). If the increase in expenditure negatively influences economic growth, then policymakers need to be cautious while implementing an expansionary fiscal policy. If expenditure enhances economic growth, policymakers need to focus their attention on the potential of said expansionary fiscal policy. However, it is important to manage the deficit which arises due to increase in public expenditure, and its impact on the economy.

Fiscal discipline should be maintained while the government is in pursuit of higher economic growth. In India, the committee for Fiscal Responsibility Legislation was constituted on January 17, 2000, to oversee the current fiscal system and recommend a draft legislation on the fiscal responsibility of the government. It was announced in the 2000–01 budget that the government intended to introduce an institutional mechanism to the Fiscal Responsibility Act to restore fiscal discipline. The Fiscal Responsibility and Budget Management (FRBM) bill was introduced in the year 2000. The FRBM bill was totally undemocratic in its approach as it denied freedom to future governments with respect to fiscal management (FRBM-Circular, 2008). The FRBM Act is based on the preamble to provide responsibility to the central government to ensure inter-generational equity in fiscal management along with long-term macroeconomic stability, by achieving sufficient revenue surplus, thereby eliminating fiscal deficit. Fiscal discipline will be achieved by limiting government borrowings, debts, deficits, and curtailing higher public expenditure (Bagchi, 2004).

There is a lot of debate regarding the existing theoretical and empirical analysis on the economic effects of increased public expenditure. Some support increased public expenditure because it helps to put money into circulation, increases investment activity and employment, and reduces tax averseness. Others argue that an increase in public expenditure will lead to a fiscal deficit and create debt (Jamshaid, 2010). There are two approaches to understanding the relationship between public expenditure and economic growth. One is the Wagnerian Law approach and the other is the Keynesian approach. According to Wagner's Law of Increasing State Activities, higher government activity and public expenditure will lead to economic growth (Wagner, 1883). According to Keynes

(1936), expansionary fiscal policies will help to increase economic activities. The objective of this paper and its focus is to study the causal relationship between public expenditure and economic growth in the presence of the FRBM Act.

2. INDIA'S PUBLIC EXPENDITURE:

The government's activities started increasing post-independence; both, intensive and extensive expansion in government activities during the planning period resulted in a rise in public expenditure. In 1950–51 the total public expenditure (capital and revenue expenditure) was ₹ 900 crore, it rose to ₹ 7,843 crore in 1970–71, and to ₹ 1,63,520 crore in 1990–91 (RBI, 2017). In developing countries where national income has been steadily rising, an increase in public expenditure is a commonly noticed phenomenon. In some western countries, the proportion of public expenditure to national income has remained stable due to a proportionate rise in national income. India's GDP to public expenditure ratio was stable until 1990–91 at 28.7%, which rose from 15.3% in 1960–61. The government wanted to check the rise in public expenditure, and was able to reduce it to 24.7% in 1996–97, and subsequently to 25% in 1997–98 (Misra, 2016). Indian public expenditures can be classified under two heads i.e., developmental expenditure and non-developmental expenditure.

2.1 DEVELOPMENT EXPENDITURE:

During the planning era that lasted five years, the developmental expenditure increased due to expansion of developmental activities. The ratio of developmental expenditure (State and Central Government combined) to total expenditure was 36.2% in the year 1950–51. In 1980-81, this ratio was at its highest at 64.6%; there was a significant decline in the ratio during the liberalisation phase, when it stooped to 59.8% in 1990–91. In recent years public expenditure has gained increased significance, keeping this ratio at58.7% in 2011–12 and 58.6% in 2013–14 (Misra, 2016). In the revenue account, developmental expenditure has increased due to a rapid increase in subsidies. Subsidies paid from the union budget have increased to ₹ 2,58,000 crores in 2014–15 from ₹ 43,000 in 2002–03, as the ratio of subsidies to GDP reached to 2.58% in 2013–14 (Budget, 2016-17). The major subsidies currently are on food, fertilizers, and petroleum. The government is now trying to reduce these subsidies; because when these subsidies were introduced in the country, economic conditions were not favourable. The Government of India also initiated steps for improving education and healthcare. The expenditure on education in 2013 was 3.9% of the GDP compared to 6.3% of the GDP in Brazil. Public expenditure on health in India in 2013 was 1.1% of the GDP (World Bank Indicators, 2015).

2.2 NON-DEVELOPMENT EXPENDITURES:

After the first three decades of the planning period, the relative importance on non-developmental expenditure has reduced, but the absolute amount of non-developmental expenditure has increased, along with the share of non-developmental expenditure to the total expenditure. Non-developmental expenditure has a tendency to grow with the growth of per capita income and population. Public expenditure has a long-run tendency to increase relatively with the growth of national income aggregates such as GDP and population, as per the Law of Increasing State Activities (Wagner, 1883).

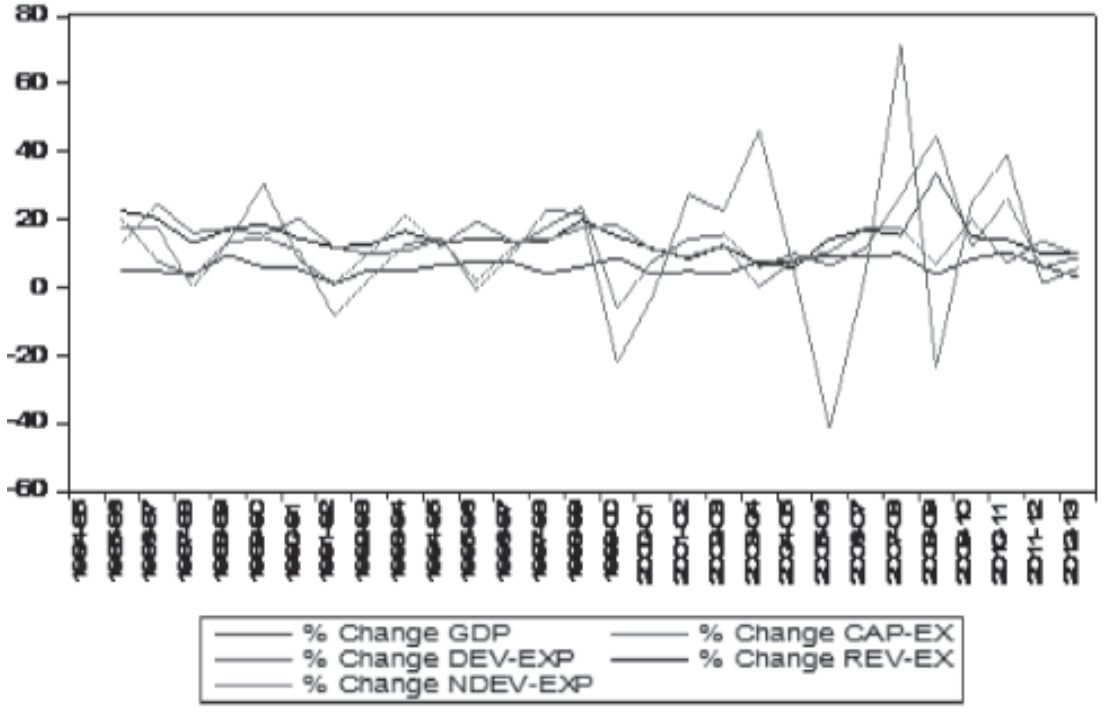
Non-developmental expenditures of India made by the central government towards areas such as defence have considerably increased; the defence expenditure in 1980–81 was ₹ 3278 crores. It rose to ₹ 10,874 crores in 1990–91, ₹ 1,24,374 crores in 2013–14, and ₹ 1,37,359 crores in 2014–15. India has experienced a rise in defence expenditure due to national security threats, which makes the postponing of defence modernisation strategy risky for the country. Another reason for increased expenditure is rapid change in defence technology and its rising cost.

Expenditure on interest payment is considered unproductive; it had increased during the planning period. In 2014–15, the interest payment expenditure of the central government alone was ₹ 4,04,019 crores, which was 3.2% of the GDP (Budget, 2016-17). Over a period of time, the amount of public debt has increased, and the interest liability of the government has also increased. The interest expenditure can be reduced by quick retirement of the debt; it can be financed disinvestment (Mundel & Rao, 1990).

One of the causes of rise in Indian public expenditure is high population growth. During the last six decades from 1951 to 2011, India has faced a population explosion. India was on the second stage of demographic transition in 1950 when the population was more than 36 crores; it rose to 120 crores in 2011 and 132 crores in 2016. Public expenditure needs to be curtailed for bridging the fiscal deficit.

Figure-1 shows a comparison of percentage change in GDP (substitute of economic growth), with real figures of revenue expenditure, capital expenditure, developmental expenditure, and non-developmental expenditure. There is highest fluctuation in percentage change in capital expenditure compared to other public expenditures. The percentage change in GDP is showing a constant trend with upward movement from year 2003–04.

Figure-1: Percentage Change in National Income & Public Expenditure.



Source: Reserve Bank of India, 2016–17

Both, public expenditure and national income, change simultaneously within the considered period. This creates the need for testing the direction of causality suggested by the Wagnerian law and the Keynesian approach.

3. LITERATURE REVIEW:

Extensive literature on the theoretical and empirical debate between Wagner's law and the Keynesian law attempts to validate the causal relation between public expenditure and GDP. Singh and Sahni (1984) examined the causal link between public expenditure and India's national income, and found a bi-directional causality between public expenditure and national income. Ahsan *et al.* (1992) studied data from the United States and failed to detect any causality between public expenditure and national income. Afxentiou and Serletis (1996), Ansari *et al.* (1997), and Abizadeh and Yousefi (1998) examined cross-country data; they were unable to find any evidence supporting Wagner's law. Bohl (1996) studied G7 countries (Post World War-II) and found evidence for Wagner's law in the United Kingdom and Canada out of G7 countries. Frimpong and Oteng-Abayie (2009) examined the West

African Monetary Zone country data and results supported neither Wagner's view nor the Keynesian view. Verma and Arora (2010), and Ray (2012) examined the causal relation between public expenditure and GDP on Indian data and found a short run causality between economic growth and public expenditure, supporting Wagner's law.

Muhlis and Hakan (2003), used the natural log of annual data of the Turkish economy from 1965–2000; co-integration and Granger causality tests support neither Wagner's law nor Keynes' hypothesis. Jamshaid *et al.* (2010), examined the direction of causality between public expenditure with some selected expenditure components, and the national income of Pakistan. The Toda-Yamamoto causality test was used for annual data of 1971–2006; results concluded in favour of Wagner's law. There exists a unidirectional causal relationship flowing from GDP to public expenditure. Olugbenga and Owoye (2007) used data from 1970–2005 for 30 OECD countries and found unidirectional and long run relationships from public expenditure to economic growth supporting the Keynesian law for 16 countries. On the other hand, unidirectional and long run relationships between economic growth and public expenditure supporting Wagner's law were observed for 10 countries, while four countries showed a bi-directional causal relationship between public expenditure and economic growth. Ergun and Tuck (2006) used the Granger causality test to investigate the causal links between the two variables for countries like Indonesia, Malaysia, Philippines, Singapore, and Thailand by using annual data from 1960–2002 and found that causality runs from public expenditures to national income only for Philippines.

The relationship between public expenditure and economic growth yields mix results and the debate is never ending. Designing policy which addresses important issues like recession, inflation, stagflation, unemployment, and income inequality is very cruisial. It gives central authorities the ability to boost their economy through fiscal measures, notwithstanding a change in the share of government spending to GNP. Knowing this long-term relationship helps to reach an estimate regarding the public spending and national output. This further enables researchers and the government to recognize a yardstick against which the fiscal policy can be designed. The dynamic between government spending and national output also contributes to the sustenance and preservation of public finances. This is important more so when the government is having a hard time limiting its expenditure, in order to maintain fiscal discipline. Thus, understanding this dynamic helps provide an academic outline based on which, fiscal policy adjustment plans related to medium-term budgetary goals can be formulated, scrutinized, and judged.

4. METHODOLOGY:

The objective of this paper is to study the causal relationship between public expenditure and economic growth in the presence of the FRBM Act. Determinants of economic growth are not taken into account. Granger (1969) proposed the concept of causality using a VECM model. In this study, Granger causality is used to investigate the causality between public expenditures and GDP growth based on the VECM model.

4.1 Data & Findings:

The data used for testing the causal relationship between public expenditure and economic growth is captured for the period from 1980–2016. The study uses a natural log of annual data of GDP, Development Expenditure (DEX), Non-Development Expenditure (NDEX), and the Net Fiscal Deficit to GDP ratio (NFD). A dummy variable is taken to capture the impact of the FRBM Act (DFRBM); a value of zero from 1980 to 2002, and a value of one from 2003 to 2016. The data is taken from the RBI's Handbook of Statistics, 2015–16. Nominal variables are deflated into real ones by the GDP deflator (2004–05 constant price). This study uses tests like the ADF, Johansen cointegration test, and Granger causality test.

4.1.1 Stationarity Test:

For conducting a causality test, stationarity of the time series is a must; the efficacy of any autoregressive model for establishing the relationship among variables is based on the assumption of stationarity of the variables. Non-stationarity of time series implies that variables may be co-integrated in the long run. Thus, stationarity and co-integration tests must precede the causality test based on VAR. The Augmented Dickey Fuller (ADF) test can be employed to test the unit root (Green, 2003). Following this, AR(p) regression should be estimated by equation (1) for testing the unit root. The model is 'augmented' by ΔY_{t-j}.

$$\Delta Y_t = \mu + \beta Y_{t-1} - \sum_{j=1}^{p} \alpha j \, \Delta Y_{t-1} + \varepsilon_t \quad \text{..... (1)}$$

The ADF unit root test has a H_o: $\beta = 0$ versus an H_1: $\beta < 0$. The results in Table 1 of the ADF test show the order of integration of the variables and the presence of a unit root. The variables are stationary at first difference, meaning that GDP (Y) is stationary at I(1) first difference; the Net Fiscal Deficit (NFD), Development Expenditure (DEX), and Non-Development Expenditure (NDEX) are also stationary at I(1) first difference.

Table 1: Unit Root Test

Variables	Order of Integration	t-statistic & Prob.	Stationarity	Variable	Order of Integration	t-statistic & Prob.	Stationarity
Y	I(0)	0.551228 (0.9868)	Not-Stationary	**Y**	I(1)	-4.724860 (0.0003)	Stationary
NFD	I(0)	6.438175 (1.0000)	Not-Stationary	**NFD**	I(1)	-4.995687 (0.0006)	Stationary
DEX	I(0)	4.107904 (1.0000)	Not-Stationary	**DEX**	I(1)	-0.107904 (0.0000)	Stationary
NDEX	I(0)	4.14974 (1.0000)	Not-Stationary	**NDEX**	I(1)	-3.17300 (0.0000)	Stationary

Estimates show that the null hypothesis of non-stationarity is rejected at first difference for all variables at the particular level of significance described by the p-values in parenthesis. This implies that all the variables are integrated of order one I(1).

4.1.2 Cointegration Test:

After testing stationarity, the next step is to check if there were any long run tendencies between public expenditure and national income. Maximum likelihood test procedure is used, to identify the number of cointegrating vectors with the help of two statistical tests i.e. trace test statistic and the Maximum Eigen value test statistic (Johansen, 1988; Johansen and Juselius, 1990)

Table 2 below shows that the null hypothesis of no co-integration is rejected; this indicates cointegration at the 5% level of significance with lag lengths of 2 according to the Schwartz criterion. The estimates suggest that there is cointegration and a long-run relationship between GDP (Y), Development Expenditure (DEX), Non-Development Expenditure (NDEV), and Net Fiscal Deficit (NFD).

Table 2: Johansen Cointegration Test:

Ho: No Co-integration	Max-Eigen Statistic	Critical Value (5%)	Prob.	Trace Statistics	Critical Value (5%)	Prob.
Y and NFD						
Reject	22.75283	14.26460	0.0018	26.97910	15.49471	0.0006
Y and DEX						
Reject	25.93730	14.26460	0.0005	29.08608	15.49471	0.0003
Y and NDEX						
Reject	16.26972	14.26460	0.0238	16.92812	15.49471	0.0302

4.1.3 Causality Test:

The Granger Causality Test based on the Vector Error Correction Model (VECM) is used to estimate the causality between public expenditure and national income in the presence of a dummy variable of fiscal discipline (the FRBM Act). The test involves estimating the following equations of regression:

$$Y_t = \sum_{i-1}^{n} \alpha_i NFD_{t-i} + \sum_{i-1}^{n} \beta_i Y_{t-j} + \gamma_1 DEX_t + \gamma_2 NDEX_t + \gamma_3 DFRBM_t + u_{1t} \quad (2)$$

$$DEX_t = \sum_{i=1}^{n} \emptyset_i NFD_{t-i} + \sum_{i=1}^{n} \delta_i DEX_{t-j} + \gamma_1 NDEX_t + \gamma_2 DFRBM_t + \gamma_3 Y_t + u_{2t} \quad (3)$$

$$NDEX_t = \sum_{i=1}^{n} \beta_i NFD_{t-i} + \sum_{i=1}^{n} \beta_i NDEX_{t-j} + \beta_1 DEX_t + \beta_2 DFRBM_t + \beta_3 Y_t + u_{3t} \quad (4)$$

Where,
Y= National income,
DEX = Development Expenditure,
NDEX = Non-Development Expenditure,
NFD = Net Fiscal Deficit to GDP,
DFRBM = Dummy Variable for FRBM Act.

Estimating the lag length for the causality test is important because causality results are sensitive to the number of lags included (Gujarati, 2011). Akaike (AI) and Schwarz Information Criterion (SIC) are used to select the optimal lag length (k) of the causality test. The following hypotheses were tested:

Hypothesis:

Null Hypothesis	Alternate Hypothesis
$H0_A$: Y does not Granger cause DEX	**$H1_A$**: Y Granger cause DEX
$H0_B$: Y does not Granger cause NDEX	**$H1_B$**: Y Granger cause NDEX

The Granger Causality Test based on the Vector Error Correction Model (VECM) can be used as the variables follow I(1) order of integration, and are co-integrated. VECM is used as an alternative to the VAR model, because if individual variables are non-stationary at level and are co-integrated, the VECM model includes the error correction term, which is obtained from the co-integrating regressions. This has led us to use the VECM (Gujarati, 2011).

For estimating the causality by VECM using cointegrating variables, the optimal lag has to be selected, as causality estimates are cumbersome and sensitive to the selected lag length. The optimum lag length (k) is 2, based on AI and SC and LR criteria; the maximum order of integration (d) is 1 for the model. The Granger Causality Test using VECM and chi-square statistics is shown in Table 3.

Table 3: Granger Causality (VECM) Test Estimates:

VEC Granger Causality/Block Exogeneity Wald Tests Sample: 1 37 Included observations: 34			
Dependent variable: D(Y) (k= 2) (d = 1)			
Excluded	**Chi-sq**	**Df**	**Prob.**
D(NFD_GDP)	22.27326	2	0.0000***
D(DEX)	36.62636	2	0.0000***
D(NDEX)	9.448273	2	0.0128***
All	56.50451	6	0.0000***
Dependent variable: D(DEX) (k= 2) (d = 1)			
Excluded	**Chi-sq**	**Df**	**Prob.**
D(NFD_GDP)	0.686010	2	0.6204
D(Y)	1.537502	2	0.3548
D(NDX)	10.70314	2	0.0032***
All	17.40165	6	0.0286**
Dependent variable: D(NDEX) (k= 2) (d = 1)			
D(Y)	1.979588	2	0.3717
D(NFD_GDP)	0.121590	2	0.9410
D(DEX)	1.26453	2	0.5389
All	18.46106	6	0.0248**

k = optimal lag and d = maximum order of integration, Exogenous Dummy variables: DFRBM = dummy variable for the FRBM Act.

Note: Numbers in parentheses are probability values.

*****, **, *and denote significance at 1 percent, 5 percent, and 10 percent respectively.**

The Granger Causality Test results with respect to public expenditure and national income reveal that a unidirectional causality runs from public expenditure to national income. Development expenditures (DEX) cause a rise in national income; stimates show the direction of causality from development expenditure (DEX) to national income (Y). Non-development expenditure (NDEX) also causes a rise in national income; estimates show the direction of causality from non-development expenditure (NDEX) to national income (Y). DFRBM is taken as an exogenous dummy variable for the FRBM Act; the estimates of the causality test are carried out by incorporating the impact of the fiscal discipline policy under the FRBM Act. Estimates of causality support the Keynesian approach, which says developmental expenditure plays an important role in economic growth.

5. CONCLUSION:

This study attempts to investigate the causal relationship between developmental expenditure, non-developmental expenditure, and national income in the presence of the FRBM Act. The Act has been put in place for eliminating fiscal deficit and removing fiscal impediments in conducting effective policy-making and prudent debt management. The role of the FRBM Act is important as India has a history of consistent fiscal deficit due to increased public expenditure; the modern measure to control fiscal imbalance is by curtailing the less important expenditures.

The econometric model of cointegration and Granger Causality are used to investigate the causal relationship between public expenditure and national income. Estimates of the cointegration test shows non-spurious and long run relationships among the variables. Causality estimates show unidirectional causality between developmental expenditure and growth in national income. Developmental expenditure causes a significant increase in national income; but, growth in national income does not lead developmental expenditure to increase, rejecting the causality. An exogenous dummy variable of the FRBM Act is used to incorporate the effect of fiscal responsibility and curtailing public expenditure, to maintain fiscal deficit. This study supports the Keynesian hypothesis in the Indian economy, thus results contributing to existing literature. Developmental expenditure will lead to more income growth in India. Thus, in order to maintain fiscal discipline, non-developmental expenditure should be curtailed. The relationship between developmental expenditure and income growth can be understood as: the fiscal policy should allocate more resources towards developmental expenditure, which in turn will help to stimulate economic growth. Developmental expenditure such as capital outlay will lead to more capital formation in the economy. On the other hand, non-developmental expenditures such as defence expenditure and interest payment are important to maintain the economy as they neither increase assets nor reduce the liability. However, other non-developmental expenditures can be curtailed to maintain the fiscal deficit.

The challenge with Indian policy makers is that economic growth in India does not correspond to the increase in developmental expenditure; in spite of an increase in developmental expenditure, Indian growth has not risen to the level of other less developed countries. Repeated occurrences of economic stagnation have created serious doubts about the rationality underlying the budgetary allocation of resources. Thus, it is advisable for Indian policy makers to look into rational budgetary allocation of resources, towards development-oriented expenditure, in order to achieve higher economic growth.

REFERENCES:

Abizadeh, S. and Yousefi, M. (1998) An Empirical Analysis of South Koreas Economic Development and Public Expenditure Growth, The Journal of Socio-Economics, 27(6), 687-94

Afxentiou, P. C. and Serletis, A. (1996) Public expenditures in the European Union: Do They Converge or Follow Wagners Law, International Economic Journal, 10(3), 33-47

Ahsan, S. M., Andy C. K. and Balbir S. S. (1992) Public Expenditure and National Income Causality: Further Evidence on the Role of Omitted Variables, Southern Economic Journal, 58(3), 623-634.

Ansari, M., Gordon, D. V. and Akuamoah, C. (1997) Keynes versus Wagner: Public Expenditure and National Income for Three African Countries, Applied Economics, 29(3), 543-550.

Bagchi, A. K. (2004), 7). Neo-Liberal Reforms with Cosmietic Changes? *Economic and Political Weekly*, August: 3574.

Blanchard, O. (2009). The state of macro. Annu. Rev. Econ., 1(1), 209-228.

Bohl M. T. (1996) Some International Evidence on Wagners Law. Public Finance, 51(2), 185-200.

Budget, U. (2016-17). *Economic Survey*. Delhi: Government of India.

Chaudhuri, P. (1978). The Indian Economy- Poverty and Development. Delhi: Vikas Punlication: 84.

Chelliah, R. J. (1996). Towards Sustainable Growth: Essay in Fiscal and Financial Sector Reforms in India. 50.

Ergun, D and Tuck, C. (2006), Public expenditure and National Income: Causality Tests for Five South East Asian Countries, *International Business and Research Journal* Vol.5, No, 10: 49-58.

Ford, L (1997), *Economic Development, Financial Development and Liberalization: Taiwan, 1960-1995*, Discussion papers of the University of Birmingham, 97-25.

Frimpong, J. M., & Oteng-Abayie, E. F. (2009). Does the Wagners hypothesis matter in developing economies? Evidence from three West African monetary zone WAMZ countries. American Journal of Economics and Business Administration, 1(2), 141-147.

Economic Afairs, D. (2008), *FRBM-Circular*. New Delhi Ministry of Finance*: 2(46)*

Granger, C.W.J. (1969), Investigating causal relations by econometric models and cross-pectral methods, Econometrica, Vol. 37, July: 424-38

Granger, C.W.J., Newbold,P (1974), "Spurious Regression in Econometrics" ,Journal of Econometrics.

Greene,W.(2003), *Econometric Analysis*, 3th ed, EnglewoodCliffs, N.J.: Prentice Hall.

Gujarati, D. (2011). *Econometrics By Example*. Palgrave Macmillian.

Jamshaid, R, Iqbal, A. and Siddiqi, M. (2010), Cointegration-Causality Analysis between Public Expenditures and Economic Growth in Pakistan, European Journal of Social Sciences, Vol.13, No 4: 556-565

Johanson, S and K, Joselius (1990), Maximum Likelihood Estimation and Inference on Cointegration with Application to the Demand for Money, *Oxford Bulletin of Economics and Statistics*, 52: 169-210.

Johanson, S. (1988), Statistical Analysis of Co-integrating Vectors, *Journal of Economic Dynamics and Control*, 12: 231-254.

Keynes, J. (1936), General Theory of Employment, Interest and Money, London: Macmillan.

Meier, G. M., & Baldwin, R. E. (1978). Economic Development. 382.

Misra, V. K. (2016). *Indian Economy* (34 ed.). Delhi: Himalalay Publication.

Muhlis, B and Hakan C. (2003), Causality between Public Expenditure and Economic Growth: The Turkish Case, *Journal of Economic and Social Research* 6 (1): 53-72

Mundel, S., & Rao, M. G. (1990). Issues in Fiscal Policy. In B. Jalan, *Indian Economy: Problem and Prospects* (p. 235). New Delhi: Panguin India

Musgrave and A.T. Peacock (Eds), Classics in the Theory of Public Finance, London:

Olugbenga and Owoye (2007), Public Expenditure and Economic Growth: New Evidence from OECD Countries [http://iaes.confex.com/iaes/Rome_67/techprogram/S1888.HTM] accessed on July 10, 2018.

Omoke P. (2009), Public expenditure and National Income: A Causality Test for Nigeria, European Journal of Economic and Political Studies, Vo. 2: 1-11.

Rao, M. G. (2004). Issue in Public Finance. In K. Basu, *Performance and Prospects in 1990 and Beyound* (p. 137). Boston, M A: MIT Press

Rao, M. G. (2014). Public Finance: Development, Equity and Political Economy. *Political Trumps Economics*. Boston, M A: MIT Press

Ray, S. and Ray, I. A. (2012) On the Relationship between Governments Developmental Expenditure and Economic Growth in India: A Cointegration Analysis, Advances in Applied Economics and Finance, 1(2), 86-94

Reserve Bank of India. (2016-17). HANDBOOK OF STATISTIC. Government of India.

Singh, B. and Sahni, B. S. (1984) Causality between Public Expenditure and National Income, The Review of Economics and Statistics, 664(4), 630-644

Suleiman, A. S. Aruwa (2009). "Public Finances and Economic Growth in Nigeria: Fiscal Policy Implications in Crises Era". www.academia.com. Accessed on July 10, 2018.

Sundaram, G. D. (2016). *Indian Economy*. S. Chand & Company Ltd.

Tanzi. V. (1994), "Public Finance in Developing Countries", Edward Elgar Publishing Ltd, England.

Verma, S. and Arora, S. (2010) Does the Indian Economy Support Wagners Law? An Econometric Analysis, Eurasian Journal of Business and Economic, 3(5), 77-91.

Wagner, A. (1883). "three Extracts on Public Finance" translated and reprinted in R. A. Masgrave and A.T. Peacock (eds), classics in the theory of public finance. London: Macmillan, 1958.

Surmounting the Glass Ceiling at the Workplace

Monali Chatterjee*
Poonam Jha**

INTRODUCTION

In India, the proportion of women in the workforce has been growing significantly. Women have proven themselves to be perfect homemakers and business persons alike. Many even regard women as trendsetters across various aspects of social life. Women are believed to have become an important part of our country's socio-economic wellbeing. In depth research on glass ceiling reveals that there are invisible obstacles that thwart people of colour or certain ethnic races, and women to progress into senior management positions. These hindrances often consist of structural/organizational discrimination, low human capital, poor incorporation, and low social capital among others. According to Barnes (2017), pioneering women of race consistently break the 'strained glass ceiling', using qualities such as fearlessness, honesty with oneself, and an unwillingness to compromise on personal values. Burkinshaw, & White (2017) are of the opinion that women aspiring to senior managerial roles have to conduct themselves in a manner that is acceptable for the role and the organization.

** Faculty, Institute of Management, Nirma University, Ahmedabad*

***Doctoral Student, Nirma University, Ahmedabad*

SCOPE OF THE RESEARCH

The concept of the glass ceiling includes racism in terms of colour as well as gender. However, for the purpose of this research, the detailed study has concentrated only on gender in the Indian context, with respect to senior managerial roles or roles requiring an identified form of leadership. Examples have been drawn on the basis of a review of related literature from the last three decades. Literature from studies conducted in the West, the Far East, and in India has been reviewed in order to ensure that the context of the research remains as global as possible. The presence of the glass ceiling differs from organization to organization and it depends on the organizational culture, climate, and structure. The dominance of a patriarchal cultural or the lack of it determines the degree of the existence of the glass ceiling. The examples used to demonstrate the same are largely based in the Indian context.

WHAT IS A GLASS CEILING?

The term 'Glass Ceiling' is used to refer to the major hindrance that women and marginalized communities or people of different races face at the workplace. The United States Department of Labor has defined the concept of the 'Glass Ceiling' as fake obstacles founded upon 'attitudinal or organizational biases that prevent qualified individuals from advancing upward in their organization into management level positions' (Sabharwal and Varma, 2017). Roberto Fernandez describes the glass ceiling as "the phenomenon in which women disappear as one looks up through the levels of the organizational hierarchy" (Fernandez, and Campero, 2017).

The glass elevator is almost comparable to the concept of the glass ceiling. It refers to the perception of the unfamiliar in the familiar (Clarke, 2013). According to Jenna Goudreau, "Men that enter female-dominated professions tend to be promoted at faster rates than women in those professions" (Goudreau, 2012). This phenomenon is more conspicuous at the senior managerial levels of most organizations.

FACTORS CAUSING GENDER-ORIENTED GLASS CEILING

Glass ceiling effect can be often seen in the patterns for women's promotions. It is a locus of external recruitment and selection process. Women friendly policies should be designed to have a vast pool of female candidates, if the organizations want to reap rich dividends in the future (Fernandez, and Campero, 2017).

1. According to Nandy, S., Bhaskar, A., and Ghosh, S. (2014), very few women occupy senior managerial roles due to barriers like mental blocks and biases. Psychological (emotional, soft, warmth), societal (bread-makers), and organizational (stereotype) barriers prevent women from reaching strategic decision-making roles. Organizations should even publish an invisible human resource balance-sheet in order to track whether or not women are ascending up the professional ladder.

2. Work organizations consist of gender politics, which stops women from reaching the top management. Also, gender politics explores the gender identities and role development, bullying and sexual harassment at the workplace, struggles faced by women at the workplace (Nicolson, 2015).

3. Stereotyping occurs when individuals are evaluated on generalized characteristics associated with the group to which they belong, instead of their unique characteristics or merits. Sex stereotypes show men and women as bipolar, with men judged as masculine and achievement-oriented while women are judged as being supportive and facilitative. Such portrayals can cause a biased evaluation of women's performance and qualifications. Sex stereotypes are unfavourable for women in selection, placement, and promotion decisions, especially for managerial jobs (Pichler, Simpson, Stroh, 2008).

OBJECTIVES OF THE STUDY

Through this exploratory qualitative research an attempt has been made

- To analyse the intensity of the effect of the glass ceiling as being more visible in senior managerial roles
- To identify the possible measures to eliminate the repercussions of the same in the Indian context
- To identify characteristics of women who can demonstrate leadership qualities and can thereby shatter the barriers of the glass ceiling.
- To identify the proportion of women in the workforce facing the glass ceiling in India and beyond.

LITERATURE REVIEW

The effect of the glass ceiling in the workplace has received a great deal of popular and scholarly attention in recent years, probably due to its prevalence over a long period of time. A detailed literature review is not only necessary, but also of great importance, when it comes

to getting an aerial view of the opinions of academics and researchers. According to Sharma & Gupta, (2010), the 'Queen Bee Syndrome' has often been used to characterize and depict women who have courageously broken the glass ceiling and moved ahead to make a mark in their careers. These women then go further to adopt a 'counter militancy approach' based on their own personal and workplace successes.

Recent research on the dearth of women in senior management and the gap in gender pay indicates that women are inexplicably underrepresented. According to Sabharwal, (2013) women in senior executive positions face what is known as the 'Glass Cliff'. This term was coined by Ryan & Haslam, (2005). It refers to a scenario where women may be substituted in leadership roles; this scenario has increased the risk of negative consequences. Hunt Earle, (2012) believe that women encountering glass cliffs are more likely to leave the organization because of low job satisfaction. The glass cliff is a consequence of the glass ceiling. According to Eagly, Karau, & Makhijani, (1995), gender based leadership has more overall effectiveness as compared to other kinds of leadership. There is a discrimination of compensation and promotion for no apparent organizational or job related reasons—wherein female workers are rewarded lower than their male counterparts for the same efforts and results. Erstwhile studies have acknowledged incongruities between men and women with regards to wages and career success. According to a recent study, women represent greater than 40% of the global workforce. Though highly qualified, they don't get to occupy senior positions, and suffer earning discrepancy and occupational categorization, which leads to gender inequality (Flippin, 2017). Bass, B. M., & Avolio, B. J. (1994) say that high-involvement work teams, and empowerment along with consensus decision making makes women more successful managers than men. The rest of the studies have been categorized as below:

STUDIES IN THE WESTERN CONTEXT

As per Bartol, et al (2003), gender and ethnic differences exists in leadership behaviour; interpersonal skills (women rate higher than men), goals and tasks definitions (women rate higher than men), delegations and mutuality (women rate lower than men), feedback and reward (women rate lower than men). It was suggested that women be provided with more training to upscale the organization. The largest gender gap in senior positions is in financial sector due to a masculine culture, and the legal requirement to have a full time job, prevalent in Germany. Family work time benefits and improved childcare should be the steps for women reaching top management (Holst and Friedrich, M. 2016). According to Broadbridge, A. (2008), lack of childcare facilities, high family commitments, long working hours, and the company's corporate patriarchal culture are hindrances to women in senior positions in the retail sector. Women themselves are also responsible as they lack self-confidence and often stereotyped as less efficient. Some examples of women leaders given below, like Shahnaz

Hussain, illustrate this lack of confidence in the beginning of their career. Women have less chances of promotion as they experience very few developmental (challenging) job opportunities. Mentoring and coaching should be provided to women to scale up for senior roles (Ohlott, Ruderman, and McCauley, 1994).

Some broad-minded business places understand that there are advantages to hiring, retaining, and promoting women in the workplace. Studies have shown that businesses with a significant number of women in senior level job roles tend to perform better financially and organizationally than their counterparts with fewer or no women in senior roles. Many women face the glass ceiling in spite of substantial achievements in the workplace; this also comes in the way of achieving their career goals. Contrarily, men continue to achieve higher wages and quicker promotions. E.g. In 2005, in the US, women in full time employment earned 81 cents for every dollar earned by men for putting in the same amount of work. In 2001, seven women filed a class action suit on behalf of the women working at Walmart. They pressed charges against discrimination in pay and promotions. It took Walmart much struggle to bounce back after this incident; after this, the company began to offer a 15% manager's bonus to women and minority members. (Daft, 2012).

Hekman, Johnson, S. K., Foo, & Yang, (2017) commented that women leaders engaged in diversity-valuing behaviours are placed at a disadvantage with worse performance ratings than their male counterparts, due to traditional negative race and sex stereotypes, which still exist in society. Songini, & Gnan, (2009) find that in SMEs, few women occupy governance and managerial roles. They further add that women usually opt for operating and supporting roles in SMEs, because of the glass ceiling. Kephart, & Schumacher, (2005) observe that women often leave the corporate world due to the glass ceiling effect, coupled with a high stress environment, and instead start their own businesses.

The glass ceiling is an invisible barrier that separates women from top management positions.

STUDIES IN THE INDIAN CONTEXT

Indians still perceive women as weak, unaggressive, and emotional for higher level management positions. Factors creating barriers include male dominated society, lack of leadership style, gender based pay, and work-life balance for working women; social norms and taboos cause gender discrimination (Barik, 2014). Factors like competence, knowledge, skills, performing in challenging environments, and support from family, colleagues, and superiors on a continuous basis enable women to progress to senior positions, while an absence of support and mobility of women are disablers of women when it comes to career

progression. Use of technology, flexible working hours, crèche services, and mentoring assist a lot of women in climbing the success ladder (Rath et al, 2015). Social values and a changing global focus have changed the Indian workforce. Indian women are successful in senior positions due to support from their organisations, their families, and their individual passion (Nath, 2000).

The number of Indian women in higher managerial designations at the workplace has plummeted significantly. Grant Thornton's study, titled 'International Business Report' revealed that the percentage of women in higher designations in the Indian workforce decreased from 19% in 2013 to 14% in 2014. Globally, this proportion formed by women in 2014 was 24%, with China at 38%, Eastern Europe at 37%, and Southeast Asia at 35% leading the way. For this research, more than 6,700 interviewees were questioned between November, 2013 and February, 2014 in India and globally across industries. The research reported that despite the widespread encouragement to improve women's contribution in the workforce and address the lack of women at the top, half the number of Indian businesses have no scope of mentoring or counselling women, and addressing their issues (Malhotra, March 7, 2014). Dinakaran, U. (2016) says that organisations should get women mentors on board by adopting strong leadership.

In Indian organizations, Human Resource Director (21%) is the most commonly occupied position by women in senior positions. 18% of women representatives occupied other leadership positions in companies. The report mentions that Indian businesses have negligible female representation in senior roles such as general/office manager, director and president/vice president. The survey triggered the formation of regulations to get women on corporate boards and executive committees, and to make way for their career paths. The research of McKinsey & Co, showed that women's representation on executive boards of Indian companies currently stands at a meagre 5%.

Fatema Hunaid, Partner, Transfer Pricing Services, Grant Thornton India, states that the Companies Act, 2013, is set to have extensive implications for business boardrooms across India. It makes it compulsory for every listed company to have at least one female director within a year, and other companies reporting minimum revenue of ₹ 300 crores to have at least one female director within three years; this is set to create a wide career pipeline for women to rise up the corporate ladder, as well as open doors for more women candidates on company boards (Malhotra, March 7, 2014). Bloomberg reported that "nearly half of the top 100 companies traded on the Bombay Stock Exchange including the biggest two by market value, do not have even a single female member on their boards. The report also highlights that in an average year, just 14% of graduates hired at mid-level positions in Indian businesses are women, compared to the global figure of 21%. It calls on corporate India to

unpack the current male bias in hiring and promotion, saying that is key to increasing diversity". Sabharwal, M., & Varma, R. (2017) observe that Asian Indian Scientists need to be extraverted, assertive, individualistic, and confident to compete with western models of leadership to break the glass ceiling.

STUDIES IN THE EASTERN CONTEXT

The selection of senior executives depends upon individual competencies. Koreans have a positive attitude towards foreign born Koreans than their Chinese counterparts. Culture and traditions are resistant among the Chinese (Tung, 2008). Researchers have studied the effectiveness of male and female leaders. A research revealed that men and women are equally effective, but they are more effective in leadership roles that are seen to be congruent with their gender (Eagly, Karau, and Makhijani, 1995).

TYPES OF LEADERSHIP

A general categorization of the types of leadership is given below:

Types of Leadership	Description
Autocratic Leadership	The leader holds the authority and responsibility, and takes all the decisions.
Democratic Leadership	The leader considers the view of all the team members. It is most preferred.
Strategic	The leader is the head of the organization.
Transformational	The leader transforms the entire organization, motivates people, and has many followers
Team	The leader who focuses on team culture, working with the people.
Cross-Cultural	The leader who is efficient in international policies.
Facilitative	The leader who assists in tasks.
Laissez-faire	The leader who gives authority to the subordinates.
Transactional	The leader who engages in day to day activities.
Coaching	The leader who acts a coach and supervises.
Charismatic	The leader who influences people by their characters.
Visionary	The leader who see the future.

Source: (Sugwekar, March 10, 2017)

Among these types, transformational and transactional are commonly said to be perceived among women as senior managers.

BARRIERS FOR INDIAN WOMEN IN THE WORKPLACE

A model which highlights the relation of occupational segregation with respect to gender and wage gap was proposed by Becker, in 1975 According to Becker, an employer's tastes or preferences cause discrimination in the labour market. According to him, some companies hire women only if they are willing to work at low wages.

Barriers for Indian women at work take multiple forms as seen in Exhibit 2

Societal Factors	**Socio-cultural, legal, personal and organizational forces**	Affect a woman's rise to the upper echelons of an institution are for the most part, universal.
	Women – Primary Caretakers	Many women quit or drop out midway through their careers to take up responsibilities at home. In India, women are still considered to the primary caregivers, and socio-culturally it is expected that they will be the ones to sacrifice (their careers) if someone is needed to look after the family.
	Child Birth	The responsibility of child birth and child rearing are primarily a women's job, which results in lower experience at the workforce.
	Women - Emotional	Women are perceived to be more emotional because their management and leadership styles are different.
	Standards for Women	Women are not only held to higher standards than men but also because they are neither made aware of, nor given opportunities that would catapult them to the upper echelons.
Work Place	**Gender Pay Gap**	Presence of gender pay gap for the same job, and the pay gap widens with higher pay and responsibility.
	Career Break	It is very difficult for women to come to employment after a career break, because of marriage, pregnancy, child-birth, or change of job/location, which creates a loop in their career.
	Part Time Jobs	Women are required to compromise at the work place, where women comprise of majority of the part-time workforce, thereby gaining lower hourly rates and less accumulated superannuation.

Exhibit 2 Barriers for Indian Women at the Workplace

Source (Korde and Patel, 2017)

A model highlighting the racial discrimination followed by employers, employees, and customers was developed by Becker (1975). This model, however, has been used by Becker as well as other economists to explain gender discrimination in the workplace. Ragins, B. R., Townsend, B., & Mattis, M. (1998) believe that CEOs should bridge the gender gap to break the glass ceiling faced by women. This can be done through focus interviews, counselling women, and providing a positive organizational climate.

Examples of Successful Indian Senior Women Managers/Entrepreneurs in the Last Decade

The examples below demonstrate complex leadership issues faced by successful Indian women, and situations that required the attention and leadership of the decision maker. These examples show how they were able to overcome these invisible barriers.

Indra Nooyi has been an inspiration for many young women, particularly those from developing countries. She came from a simple, middle-class family in Chennai and tried to overcome barriers when women had limited choices in their professional careers. Indra Nooyi earned management degrees from IIM, Calcutta and the Yale School of Management. She joined the Boston Consulting Group and later PepsiCo, in 1994; since then, her rise has been phenomenal. She has been serving as the chair and CEO of PepsiCo Inc. Indra Nooyi joined PepsiCo as the chief strategist and made the most of the opportunity by helping to turn the company around. She has assisted PepsiCo in doubling net profits to more than 5.6 billion, by focusing on enhanced nutrition and promoting workplace diversity. According to former CEO Roger Enrico, Indra could drive deep and hard with a sense of fun. Indra often sings in her office and even goes barefoot to work. (Mary Coulter, 2010).

She became the organization's CFO and directed the strategic acquisition of Tropicana and the merger with the Quaker Oats Company. These initiatives added a line of health food products to a company that has traditionally been associated with fun food (Annapoorna, 2015). Attempting to propose her idea of work life balance she remarks, "There are times when the stress is so incredible between office and home, trying to be a wife, mother, daughter-in-law, and corporate executive". So for her, if her work was her religion, her family provided a pillar of support.

Kiran Mazumdar-Shaw, Chairman and Managing Director, Biocon, observes that women are often limited by voluntary restrictions which they regret later. They tend to submit to "the absence of enabling factors, instead of viewing those as a challenge that need to be overcome in pursuit of our goals. The proverbial glass ceiling is a similar mental construct that women must shatter to fulfil their dreams" (Mazumdar-Shaw, 2012). Kiran Mazumdar-Shaw had faced such obstacles since 1978 when she started Biocon. She had to surpass numerous issues that cropped up and questioned her credibility, because of factors such as her gender, age, and perceived lack of exposure to the business of biotechnology. She braved the challenges boldly and in the process, also further built her self-confidence. She was gradually able to hold her own in a "predominantly male bastion". Ms Shaw also had to

handle her parents' concerns regarding her security when she travelled alone. Apart from her belief that the spirit wins all, Ms Shaw also believed in the importance of ethics in the workplace, and in the ability of women to compete with men. She believed that women were neither physically handicapped nor at a disadvantaged as compared to men. She feels these perceived disadvantages are simply in the mind. Ms Shaw believes that organisations should be built on differentiation strategies, and on the act of challenging status quos, according to Business Today (2009). At Biocon, an Indian style of management style is employed to deal with issues regarding gender sensitivity. Women in the organization are encouraged to not come to work at odd hours, and male escorts are provided for their security in transit, where needed. Creche services are also provided by the organisation for women with children that need taking care of.

Similarly, in the 1980s, a strong male bastion had formed their strong coterie of marketing directors. After her education at IIM-Kolkata and the Jamanalal Bajaj Institute of Management Studies, Mumbai, Vinita Bali bagged a job at Voltas and never turned back. Her brief tenure at Voltas served as a wonderful opportunity. She launched Rasna, the fruit drink concentrate that became an instant success and is still doing well (Rediff, November 8, 2004). Vinita Bali was among the first to shatter the glass ceiling when she moved to chocolate-maker Cadbury as a young brand manager and was later promoted there as the marketing head. In the mid-1990s, she relocated to Atlanta, and ranked as the second Indian woman in the top strata of a global beverage giant. Her remarkable career culminated in an inspiring peak when she became the MD of Britannia Industries (Bali, 2013).

Kirthiga Reddy, M.D (CEO) of Facebook India, who is also India's first Facebook employee, is expanding the social media business across India. She states that her organization invests in women because women are the future. Facebook even hires women leaders when they are pregnant, according to Sharma, E. K. (2013). Born in a middle class family, Reddy graduated with Computer Science and Engineering in India, an MBA from Stanford University, and an MS from Syracuse University. She is associated with companies like Motorola and Silicon Graphics. According to her, the glass ceiling is a myth. She adds that it is much harder for women to get the same role or responsibility as men. However, women can aspire to any role (Sra, 2011). Reddy mentions that according to studies women are prone to self-doubt and often underestimate their capabilities. Women should set goals, go out, and implement things. Women should go beyond their job descriptions and play larger role to surpass the glass ceiling, according to Sharma E. K. (2011).

Shahnaz Hussain, is a prominent women entrepreneur, and CEO and MD of Shahnaz Husain Group of Companies. Coming from an orthodox family, Hussain had to conform to the prevailing customs in the family, and comply to its pressures. She was married when she was only fifteen years old, and became a mother at sixteen. She studied cosmetic therapy and cosmetic chemistry for ten years at premier institutions of the West, like Helena Rubinstein, Swarzkopf, Christine Valmy, Lancome, and Lean of Copenhagen. Founded upon the principle of "Care and Cure," she set up her own herbal clinic preparing Ayurvedic products and clinical treatments for skin, hair, and body care. These have become game-changers in natural beauty care. Initially, she did not manage to get good models as brand ambassadors for her advertisements. To overcome this challenge innovatively, she organised seminars, workshops, door to door campaigns, and word of mouth campaigns; she even went on to become the brand ambassador herself, for her products. While sharing her views on women entrepreneurship, the glass ceiling, women in family businesses, and the role of culture, she observes that entrepreneurship actually implies liberation and individuality. Women in India have begun to express self-reliance over the last two or three decades. Therefore, the ratio of women to the total number of entrepreneurs in India has started growing (Chowdary, 2007).

Arundhati Bhattacharya is the Chairman of SBI. She joined SBI at the age of twenty-two as a Probationary Officer (Sahney, March 8, 2018). Bhattacharya blames the challenge of changing attitudes in a society that still largely views women as primary caretakers and says having children leads many women to fall off the corporate ladder. To address the problem, in 2014 she brought in two-year sabbaticals to allow women to take career breaks without falling out of the workforce in banks. She wanted to ensure men assume their share of responsibilities during child care and women continue working from home, so they can prevent drawbacks or fall behind According to FRPT (2016), in order to have diversity in the firms, firms should recruit more women.

Neelam Dhawan is an Economic Graduate and MBA from FMS Delhi. She has worked with Microsoft, IBM, and HCL. Dhawan served as Managing Director of Hewlett-Packard Enterprise India from July 1, 2008 onwards, handling a diverse portfolio. She has been the Director of ICICI Bank Ltd., since January 12, 2018 (DataQuest 2005). According to Dhawan, the IT segment in India is quite new and she affirms the existence of the glass ceiling exists. Dhawan managed to become one of the first women leaders of an IT organization in the country, when she took up the post of India head of the world's largest software company, Microsoft, in 2005. She currently leads the operations in India for computer-maker Hewlett-Packard. One of Dhawan's great achievements has been the efficient handling of the services and offshoring division at HP. Before joining HP, Dhawan handled Microsoft's India operations from 2005 to 2008. (Prasad, 2018)

Organizations have started encouraging gender diversity in the workplace to drive productivity and boost performance. IBM India, for instance, set a milestone becoming an attractive employer for women and differently abled people. IBM has since taken many steps to promote inclusiveness in the workplace, while also laying a strong foundation for women and differently abled people to achieve success .

LIMITATIONS OF THIS RESEARCH

For the purpose of this research cases and examples of women only in the Indian context have been considered. They largely belong to the urban areas and have not been closely categorized in terms of other demographic aspects like age or geographical locations. The selection of examples is generic and does not belong to any one particular industry. As a result of the convenient sampling, examples have been cited from a mixed class of women entrepreneurs, business persons, project heads, and senior managers. However, the observations made on the basis of these examples are exhaustive and might be partially representative of a larger population. This makes way for further research in the area, for advanced developments in research and policy making for the twentieth century workplace. Although only limited case studies have focused on studying women at the senior managerial level, this study can be extended to other industries like manufacturing, telecom, pharmaceuticals, and even retail.

OVERALL FINDINGS: CHARACTERISTICS OF SUCCESSFUL WOMEN

Women face many hurdles in their career development, but they can convert these hurdles into opportunities by mentoring, networking, and taking up career tracking approaches (Wirth, 2001). Despite the ongoing social awareness about gender equality, India is a still a male dominated society. According to a study done by Catalyst, women currently hold less than 5% (only 4.6%) CEO positions in S&P 500 companies. This is a very small .When it comes to holding leadership positions, less than 15% (only 14.2%) are held by women. This is probably because “stereotypes persist” (Stewart, October 10, 2015).

Only 3-6% women get to occupy senior positions, according to the studies mentioned above, in the Indian context. Most IT companies like ITC, Infotech, and SBI still follow gender elevators. While examining the various kinds of research that have been conducted so far on this all-pervasive malpractice, it was possible to identify some ways to shatter the glass ceiling.

METHODS TO SHATTER THE GLASS CEILING

1. Success Planning: Women need to strategically plan for success. They need to be proactive and chase opportunities while highlighting their achievements (Stewart, October 10, 2015). Women should plan, think ahead, and be prepared for the future (Reynolds,1997).

2. Aligning competencies with the Top Management: Women should equip themselves with all the necessary skills, qualifications, and experience required for the jobs that they want within organizations. They should take informed decisions while being action-oriented. Schreiber, C. T., Price, K. F., and Morrison, A. (1993) believe that the top rungs of management should use diversity to increase organizational effectiveness and reduce the barriers faced by women.

3. Study the Career Paths of Successful Women as Examples: Women should take inspiration from other successful women and analyse which personality traits and achievements made them successful. This introspection can be very fruitful. Women should be firm, have a strong-will power, and be optimistic about pursuing new opportunities.

4. Seeking out Mentoring Relationships: Women should consider sharing a mentor-mentee relationship with successful senior executive for assistance with breaking existing stereotypes. This could help women achieve professional growth and development. Women may also benefit from being empathetic, and understanding others' viewpoints in the workplace. Being efficient people-readers and demonstrating measured emotion is also likely to be helpful in furthering career goals. According to Flippin, (2017), development activities like mentorship and coaching should be used for succession planning of Gen X women .

5. Know the Rights: Women should know their rights. They should be aware of labour laws and employment discrimination. They should be able to stand up for their rights (Stewart, October 10, 2015).

6. Most of the successful women discussed above embody many of these qualities. It may be difficult for one person to possess all these qualities, but a judicious blend of several features could assure greater effectiveness in combating a glass ceiling. Additional skills needed to become a CEO or an M.D. may include a strategic vision, a result oriented attitude, responsibilities towards business profits and losses, soft skills, organizational

intelligence competencies, and entrepreneurial skills. Women should involve themselves in participative decision making and have a balanced trust with different stakeholders (Reynolds, 1997).

7. There is always a glass ceiling at the top. Women should have an ignited passion and a lot of dedication. Women should demand their rights and make their impact felt in the organization. They should prioritize their tasks. They should also seek to receive a conducive ambience at work. They should try to gain support from their organization, family, and society. A society where there is equality has always prospered. The role of women can never be underestimated.

CONCLUSION

The glass ceiling still remains a crucial emotional and pivotal aspect of the job market in any workplace in the present time and age (Korde and Patel, 2017). While sex discrimination is one of the reasons for the slow rate at which women have been promoted to middle and upper levels of management and corporate boards women's decisions pertaining to career and job selection have also been responsible for the slow progress. Men's careers and job opportunities are usually motivated by their motivation for higher rewards and promotions; women on the other hand often choose careers that provide them a greater sense of accomplishment, more control over their work schedules, and higher mobility during work hours (Williams 2013). As companies have started understanding this, they have started promoting the growth of women in the workplace. E.g. on November 22, 2010, IBM was recognized by NASSCOM for excellence in gender inclusivity. IBM in India won an award in the best IT services and products category. IBM also received an award for being the best BPO company category. IBM India was also awarded for having the most innovative programme in gender inclusivity from 2007 to 2009. (Robbins, Judge, & Vohra, 2013).

In the new era of modernization, the presence of the glass ceiling is still strongly experienced by many successful women. According to Sharma& Sehrawat, (2014) the "glass ceiling still exists and age, education, designation, and income have no impact in the modern Indian society.As opportunities have grown, the scope of gender inequality has also burgeoned. Many women have been able of overcome its strong and stubborn repercussions, but such women are few as compared to their male counterparts. The adverse effects of this glass ceiling are largely observed among the educated masses and the organized sector; they are also prominently noticed in white collared jobs. As a result of women getting higher academic qualifications, enhanced skills, and more technical knowhow, they are able to

successfully secure their place at the helm of the organization, but, the unseen forces of the glass ceiling make many ladders of success crumble under them. This research observed the qualities that may help women to overcome the hindrances. However, by identifying more closely the organizational and societal factors that cause this glass ceiling, it may be possible to crack this phenomenon and remove it from the face of any workforce a woman may choose to be a part of.

WORKS CITED:

Annapoorna. (2015) *Indra Nooyi: A Biography*. Delhi: Rajpal, p. 2-27, 92-94.

Bali, Vinita. Business Today. (Sep 15, 2013) Retrieved from Journeys of Discovery. https://www.businesstoday.in/magazine/special/britannia-vinita-bali-tops-most-powerful-women-in-indian-business-list/story/198087.html on March 1, 2017.

Barik, P. and Bhosle, R. (2014). Time to Crack the Glass Ceiling: India Context. CLEAR International Journal of Research in Commerce and Management, 5 (7).

Barnes, J. (2017). Climbing the Stairs to Leadership: Reflections on Moving Beyond the Stained Glass Ceiling. Journal of Leadership Studies, 10(4), 47-53.

Bartol, K. M., Martin, D. C., and Kromkowski, J. A. (2003). Leadership and the glass ceiling: Gender and ethnic group influences on leader behaviours at middle and executive managerial levels. Journal of Leadership and Organizational Studies, 9 (3), 8-19.

Bass, B. M., & Avolio, B. J. (1994). Shatter the glass ceiling: Women may make better managers. Human Resource Management, 33(4), 549-560.

Becker, G. S.: "Human capital: A theoretical and empirical analysis, with special reference to education", University of Chicago Press, Chicago, 1975.Broadbridge, A. (2008). Barriers to ascension to senior management positions in retailing. The Service Industries Journal, 28 (9), 1225-1245.

Broadbridge, A.(2008). Barriers to ascension to senior management positions in retailing. The Service Industries Journal, 28(9), 1225-1245.

Burkinshaw, P., & White, K. (2017). Fixing the women or fixing universities: Women in HE leadership. Administrative Sciences, 7(3), 30.

Chowdary, Nagendra V. (July 2007) Retrieved from Interview with Shahnaz Hussain on Women Executives http://www.ibscdc.org/executive-interviews/Shahnaz_Hussain.htm on March 1, 2017.

Clarke, M. (Oct. 27, 2013) The Glass Ceiling and Elevator. Sociology of the South: Deconstructing the Dirty South—One Post at a Time.http://blogs.memphis.edu/dirtysouth/2013/10/27/the-glass-ceiling-and-elevator-2/ retrieved on March 7, 2018.

Coulter, N. V. Mary (2010). Management. New Delhi: Pearson.

Daft, R. L. (2012). Management. New Delhi: Cengage.

DataQuest. (March 10, 2005) Retrieved from Beyond the Glass Ceiling http://www.dqindia.com/beyond-the-glass-ceiling/ on February, 2018

Dinakaran, U. (2016). Assessing The Existence Of The Glass Ceiling That Affects Women's Career Growth In The Indian Hospitality Industry. CLEAR International Journal of Research in Commerce & Management, 7(5).

Eagly A. H., Karau S.J., Makhijani M.G. (Jan 1995) Gender and the Effectiveness of Leaders: A Meta-analysis. *Psychol Bull.* 117(1), p.125-45.

Fernandez, R. M., and Campero, S. (2017). Gender sorting and the glass ceiling in high-tech firms. *ILR Review*, 70 (1), 73-104.

Flippin, Candace Steele. (2017) The Glass Ceiling Is Breaking, Now What? Generations – *Journal of the American Society on Aging*, By Fall, 41 (3), p. 34 – 42.

FRPT Research. India's top woman banker Arundhati Bhattacharya sees cracks in glass ceiling. (2016). *FRPT- Finance Snapshot,* 20–21. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=118827741&site=ehost-live

Goudreau, Jenna. (May 21, 2012) A New Obstacle For Professional Women: The Glass Escalator. Retrieved on Feb., 28, 2018 from Forbes. https://www.forbes.com/sites/jennagoudreau/2012/05/21/a-new-obstacle-for-professional-women-the-glass-escalator/#10a2fd55159d

Hekman, D. R., Johnson, S. K., Foo, M. D., & Yang, W. (2017). Does diversity-valuing behavior result in diminished performance ratings for non-white and female leaders? *Academy of Management Journal*, 60(2), 771-797.

Holst, E., and Friedrich, M. (2016). Women's likelihood of holding a senior management position is considerably lower than men's-especially in the financial sector. DIW Economic Bulletin, 6 (37), 449-459.

https://www.businesstoday.in/magazine/special/britannia-vinita-bali-tops-most-powerful-women-in-indian-business-list/story/198087.htmlon February 15, 2018

Hunt Earle, K. (2012). Falling over a glass cliff: A study of the recruitment of women to leadership roles in troubled enterprises. *Global Business and Organizational Excellence,* 31(5), 44-53.

Kephart, P., & Schumacher, L. (2005). Has the'glass ceiling'cracked? An exploration of women entrepreneurship. *Journal of Leadership & Organizational Studies*, 12(1), 2-15.

Korde, Rupa; Patel, Ashini. (2017) Half the Sky: Indian Women Struggling to Break the Glass Ceiling. *International interdisciplinary Conference on Gender Studies and the Status of Women*. Edinburgh: Queen Margaret University.

Malhotra, Sarika. (March 7, 2014) Retrieved from Fewer Indian women at senior positions in workforce, finds report. Business Today https://www.businesstoday.in/management/leadership/international-womens-day-few-in-senior-positions-india-office/story/204063.html

Mazumdar-Shaw, Kiran. (January 24, 2012). 'Glass ceiling for women is a state of mind' Retrieved from http://www.rediff.com/business/slide-show/slide-show-1-glass-ceiling-for-women-is-a-state-of-mind/20120124.htm on March 1, 2017.

Nandy, S., Bhaskar, A., and Ghosh, S. (2014). Corporate glass ceiling: An impact on Indian women employees. *International Journal of Management and International Business Studies*, 4(2), 135-140.

Nath, D. (2000). Gently shattering the glass ceiling: experiences of Indian women managers. *Women in management Review*, 15 (1), 44-52.

Nicolson, Paula. (2015) *Gender, Power and Organization: A Psychological Perspective on Life at Work*. second edition. New York: Routledge. p. 54

Ohlott, P. J., Ruderman, M. N., & McCauley, C. D. (1994) Gender differences in Managers' Developmental Job Experiences. *Academy of Management Journal*, 37 (46) 67.

Pichler, S; Simpson, S. A; Stroh, L. K. (2008) The Glass Ceiling in Human Resources: Exploring the Link between Women's Representation in Management and the Practices of Strategic Human Resource Management and Employee Involvement. *Human Resource Management*, Fall 2008, Vol. 47, No. 3, Pp. 463–479.

Prasad, A. (2018, September 29). Indian women in IT who have found their way to the corner offices. Retrieved from Economic Times/ ET Bureau: https://economictimes.indiatimes.com/slideshows/people/indian-women-in-it-who-have-found-their-way-to-the-corner-offices/slideshow/17905081.cms

Ragins, B. R., Townsend, B., & Mattis, M. (1998). Gender gap in the executive suite: CEOs and female executives report on breaking the glass ceiling. A*cademy of Management Perspectives*, 12(1), 28-42.

Rath, T. S., Mohanty, M., and Pradhan, B. B. (2015). Career Advancement of Women Bank Managers in India: A Study in State Bank of India. Vilakshan: *The XIMB Journal of Management*, 12 (1).

Rediff. (November 08, 2004) Retrieved from Meet Vinita Bali, Britannia CEO, http://www.rediff.com/money/2004/nov/08profile.htm on March 1, 2017

Reynolds, Russel. (n.d.) Retrieved from Antonio Nieto-Rodriguez: Break the Invisible Glass Ceiling and Start Climbing the Corporate Ladder. http://antonionietorodriguez.com/break-the-invisible-glass-ceiling-and-start-climbing-the-corporate-ladder/

Robbins, S. P., Judge, T. A., and Vohra, N. (2013). *Organizational Behaviour*. New Delhi: Pearson.

Rowe, W. G., and Guerrero, L. (2012). *Cases in Leadership*. New Delhi: SAGE.

Ryan, M. K., & Haslam, S. A. (2005). The glass cliff: Evidence that women are over represented in precarious leadership positions. *British Journal of Management*, 16(2), 81-90.

Sabharwal, Meghna; Varma, Roli. (2017). Are Asian Indian Scientists and Engineers in Academia Faced with A Glass Ceiling? *Journal of Ethnographic and Qualitative Research*, 12 (50–62), p. 50.

Sabharwal, M. (2013). From glass ceiling to glass cliff: Women in senior executive service. *Journal of Public Administration Research and Theory*, 25(2), 399-426.

Sahney, Vasundhara. (March 8, 2018). Retrieved from Arundhati Bhattacharya: The Making of SBI's First Woman Chairperson https://www.hbrascend.in/topics/arundhati-bhattacharya-sbi-chairperson/

Schreiber, C. T., Price, K. F., and Morrison, A. (1993). Workforce diversity and the glass ceiling: Practices. *People and Strategy*, 16(2), 51.

Sharma, A., and Gupta, C. (2010). *Women in Management and Policy Making: A Youth's Perspective*.

Sharma, S., & Sehrawat, P. (2014). Glass CeilinG for Women: Does it exist in the Modern India? *Journal of Organization and Human Behaviour*, 3(2).

Sharma, E. K. (2011). Digital Diva. Business Today, 20(10), 86. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=60719925&site=ehost-live

Sharma, E. K. (2011). Facing Up to Challenges. Business Today, 20(18), 98. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=65470767&site=ehost-live

Sharma, E. K. (2013). Well Connected. Business Today, 22(19), 94. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=90083804&site=ehost-live

Songini, L., & Gnan, L. (2009). Women, glass ceiling, and professionalization in family SMEs: A missed link. *Journal of Enterprising Culture*, 17(04), 497-525.

Sra, Gunjet. (Nov 11, 2011) "Face to face with Kirthiga Reddy" India Today Retrieved from https://www.indiatoday.in/magazine/supplement/story/20111121-kirthiga-reddy-facebook-india-education-women-leaders-749624-2011-11-11 on February 12, 2018.

Steele Flippin, C. (2017). *The Glass Ceiling Is Breaking, Now What? Generations*, 4(3).

Stewart, Melissa. (October 10, 2015) Retrieved from 5 Tips on How Women can Break Through the Glass Ceiling at the Workplace. http://sheownsit.com/5-tips-on-how-women-can-break-through-the-glass-ceiling-at-the-workplace/

Sugwekar, Rhea. (March 10, 2017). Retrieved from Listontap: 12 Different Types of Leadership Styles https://listontap.com/different-types-leadership-styles/ on March 2, 2018.

Tung, R. L. (2008). Do race and gender matter in international assignments to/from Asia Pacific? An exploratory study of attitudes among Chinese. *Human Resource Management,* 47 (1), p. 91-110.

Williams, Chuck. (2013) Principles of Management. South Western Cengage Learning, p. 394.

Wirth, Linda. (2001). Breaking through the Glass Ceiling: Women in Management. Geneva: *International Labour Office*, p.1.

Advertisement and Publicity Expenditure by Banks in the Changing Banking Landscape

Sunita Sharma*

INTRODUCTION:

The profile of bank customers has changed overtime. Traditionally a customer maintaining another account would inform the first bank of such an account. Today, however, things have changed.

- Customers are no longer as loyal
- They are willing to shop around as they are more price conscious
- Longer life spans, urbanization, and higher income levels are changing traditional customer groups
- Customers are less afraid of debts
- Customers expect consultations and involvement; and desire
  - consistent and dependable performance
  - professionalism, skilled processes, and standards of performance
  - timeliness
  - cordiality, politeness, friendliness, honesty, and effectiveness in interactions
  - safe, secure, and confidential transactions

Faculty, Maniben Navavati College, Mumbai.

- Customers' financial needs have grown multifold. They now avail of various services like access to quick cash, money transfer, asset security, increased return on surplus funds, financial advice, and deferred payments.

In this digital age, competition is all pervasive in the banking sector. Thus, advertising and publicity expenditure becomes important for banks in order to recruit, entertain, and retain customers, as well as to ensure customer delight, customer equity, and brand equity.

OBJECTIVES:

The researcher wishes:

- To review the conditions of the banking landscape over the last decade
- To identify the amount spent by banks on advertisement and publicity
- To obtain the percentage value of advertising budgets when compared to the total operating expenses of the bank
- To understand how this value impacts the bank's gains.
- To explore the relationship between advertising expenditure and the bank's business.

RESEARCH METHODOLOGY:

The data has been collected from primary and secondary sources. The data of 26 banks has been collected using judgmental sampling from annual reports. The reference period taken to study the changing economic environment ranges from 2008–09 to 2016–17. The numbers given are related to the advertising expenditure. E.g. Item no. IV of schedule 16 deals with advertisement and publicity expenditure. The researcher has also tried to ascertain the amount spent by banks on advertising as a percentage of the total operating expenses.

To know the opinions of bank employees regarding banks' advertising expenditures and their impact on the business, a structured closed ended questionnaire with 10 questions was distributed to 50 bank employees from Jogeshwari to Vile Parle areas in Mumbai, Maharashtra. Sample selection was carried out using non-probability convenience sampling.

REVIEW OF LITERATURE:

Chamberlin (1933) argues that advertisements influence demand because (i) they provide information about the sellers' existence as well as the price and quality of the products being sold, to consumers in the market place; (ii) they alter consumers' wants or tastes. Grankvist, Kollberg, and Persson (2004) studied international banks' promotion strategies in the Baltic

States and have shown that the most valuable promotion tool for financial services is advertising.

Mylonakis (2008) has examined how bank advertising relates to the needs of bank customers in Greece. The findings of the study state that advertising is essential and it not only verifies a bank's critical presence in the market, but also influences customers' choices. Bhatt and Gor (2012) have explained with the help of a model, that marketing is an integral management function, and has value for improving the bank service efficacy, while creating loyal customers. Honka, Hortacsu, and Vitorino (2014) have formulated a structured model for the various stages in shopping — awareness, consideration, and choice — with respect to the US retail banking sector . Their findings show that advertising shifts awareness, more than consideration or choice. Riaz, Furgan, and Siddique (2015) have investigated the impact of advertising on commercial banks' profits, while also considering credit risk, operating efficiency, total advances to total deposits, total loans to total assets, and size ratio, over a period of four years. They used return on equity (ROE) to measure profitability. They found a positive and significant relationship. Popli and Vadgama (2017) have measured the quality of services provided by commercial banks in India, and their findings state that banks are no more clearing houses, but have instead become marketable places; in order to diversify their business and go to the global market, they have to use advertising.

Merve and Huseyin (2017) have discussed the association between banks' sales costs and income and profits in Turkey. They have found that advertising expense and financial performance share a positive relationship. They have thus suggested that banks' sales costs should be capitalized and then amortized.

BANKING LANDSCAPE OVER THE LAST DECADE:

The last decade has seen rapid changes in the banking landscape. The change has been fast, and the biggest competitive advantage now is the ability to adopt to the changes in the banking landscape in terms of changing economic environment, digitalization, globalization, sustainable marketing and social responsibility, and brand equity. According to Kotler and Armstrong (2016), the marketing landscape has seen five major developments that challenge traditional marketing strategy.

The Changing Economic Environment: 2008 brought a Great Recession to the United States and world economies, the worst since the Great Depression of the 1930s. This financial crisis left consumers shell-shocked, lacking money and confidence, with income loss, a truncated credit, lowered home values, and increased unemployment. Consumers

habituated to overspending now used resources cautiously and changed their buying attitudes and habits. This trend of sensible spending continues till date despite the economies strengthening. The new economic realities demand that consumers cut back excessive consumption to align with their incomes and to rethink buying priorities. The Great Recession forced consumers to rethink their definitions of the good life, as well as having an impact on the way they buy, sell, and live. Despite rebounding means, consumers have carried these lessons with them and are now using more discounts, spending less, and putting more in the banks. Consumers are now skeptical of debt and excess spending. They are moving from mindless to mindful consumption. This means the banks need to change their tune to reach today's more pragmatic consumers.

The Digital Age: The changing digital technology has fundamentally changed the way we interact, share, learn, and acquire. Digital technology now also has a major impact on the way banks compete for customers. Most banks offer core banking solutions for different products; they are using the National Electronic Funds Transfer (NEFT) and the Real Time Gross Settlement (RTGS) systems to make money transfers faster and cheaper. People prefer online banking in addition to offline banking. Marketers now have new ways to meet and keep in touch with customers, while banks have new tools to create products and services specific to each individual customer. There are also new communication, advertising, and relationship-building tools — these include online advertising and video-sharing, as well as using social networks and applications. This digital shift means that consumers always seek out marketers; instead it is now easy for consumers to take what used to be static marketing content and share it with friends. By 2020, people will be mostly using mobile devices to access the internet — by far, the most dramatic tool in a seller's arsenal. Devices operated by voice, touch, and even thought provide access to this fastest-growing form of marketing.

Rapid Globalization: Along with redefining customer relationships, marketers are improving the way they relate to the world. Banks can now connect with their customers and with other banks on a global platform. The competition is fierce and brutal. The questions facing banks are:

- The importance of being international
- Identifying valuable markets
- Means of entry to those markets

The answers to these new questions will define their place in the market.

Sustainable Marketing and Social Responsibility: Marketers are re-examining their social values and responsibilities. This includes corporate ethics, a responsibility towards the environment, and social responsibility. It has become essential for any business to address these. Banks can use these avenues as an opportunity to positively impact their local community. They profit by being more civic minded and caring.

Creating Brand Equity: Brands are larger than their names or symbols. A brand is the customers' experience of a product/service and its performance. It is essentially what an item means to the customer in intangibles. Essentially, brands exist and flourish in the customers' minds. This means that the value of a strong brand is its ability to capture consumer interest, involvement, and a long term loyalty. Some brands are able to forge a deep bond with their customers, thereby building a high brand equity. Their customers are comfortable paying more than they would for a competitor, instead of denying themselves or choosing a competing brand. Thus, high brand equity provides many competitive advantages, including customer equity. Bank of Baroda, Syndicate Bank, Indian Overseas Bank, Canara Bank, and The United Commercial Bank have recently adopted new logos. The banks have increased their business after adopting new logos.

BUILDING CUSTOMER RELATIONSHIPS TODAY:

It is important not only to acquire customers, but also to keep and grow them. Banks today want to attract profitable customers, as well as have them stay around forever. Their ultimate aim is to produce high customer equity through customer relationship management. Customer equity is the total combined customer lifetime values of all of the current and potential customers. In order to increase this, banks now provide electronic products and also investment banking services while continuing to perform old functions of accepting deposits and giving advances.

The bank can classify its customers (like a company) into four types.

Figure 1: Projected Loyalty Classification of Customers

High Profitability	**Butterflies** Good fit between bank's offerings and customer's needs: high profit potential	**True Friends** Good fit between bank' s offering and customer's needs: highest profit potential
Potential Profitability		
Low Profitability	**Strangers** Little fit between bank's offeri ngs and customer's needs: lowest profit potential	**Barnacies** Limited fit between bank's offerings and custome r's needs : low profit potential
	Short-Term Customers	**Long-Term Customers**

Source: Kotler, P. and Armstrong G. (2016). Principles of Marketing, Pearson India Education Services Pvt. Ltd., 15th ed. India p. 24.

The above figure classifies customers accordingly:

1. **Strangers:** are neither very profitable nor very loyal. The best relationship management strategy for such customers is to not invest anything in them.

2. **Butterflies:** are profitable but often these are not loyal. Like real butterflies, they come to a bank for a short period and then they're gone. The banks would benefit from reeling them in with lots of promotional material while there is a possibility of creating satisfying and profitable transactions with them. Thereafter, it makes sense to leave them alone until the next time around.

3. **True Friends:** are both profitable and loyal. The bank should want to constantly invest in these relationships to delight these customers. The target is to nurture, retain, and grow them. Banks should focus on turning these true friends into 'true believers' who seek them out regularly and spread word of mouth about their good experiences.

4. **Barnacles:** these individuals may be highly loyal but not very profitable. Smaller bank customers who bank regularly but do not generate much in returns would fall into this category. Like actual barnacles, they create a drag; making them perhaps the most difficult customers. A bank could improve profitability by selling to them more often, raising fees, or reducing service costs spent on them. However, if nothing works, they should be 'fired'.

Different types of customers require different relationship management strategies.

Banks now prefer online business and use of electronic products like ATM, ECS, NEFT, and RTGS to ease their own efforts and reduce costs. This leads to more impersonal relationships between customers and banks. This makes it imperative for banks to always remember that the characteristic features of services like intangibility, inseparability, heterogeneity, and perishability are essential for engagement with the customer. Therefore, banks must become customer-friendly.

FINDINGS:

Advertising and Publicity Expenditure by Banks:

Table 1 shows sales costs of 26 banks during F.Y. 2009, 2010, 2014, 2015, 2016, and 2017. Table 2 shows advertisement and publicity expenses as a percentage of operating expenses. State Bank of India (SBI) seems to have spent the highest amount on advertisement and publicity. SBI continued to spend the highest amount on advertisement and publicity among banks in 2017, followed by ICICI Bank, HDFC Bank, Axis Bank, Andhra Bank, Union Bank of India, and Punjab National Bank. Table 2 also shows that in FY 2009, United Bank of India had spent nearly 6%, and IDBI Bank had spent 3.62% of operating expenses on advertising and publicity. In 2017, ICICI Bank spent 1.95% of operating expenses on advertising and publicity, followed by SBI and Bank of Baroda. On the other hand, Punjab and Sind Bank has spent the lowest percentage of expenditure and absolute amounts on advertising. The broad conclusion which emerges from Table 2 is that almost all the banks have spent less than 2 percent. Perhaps this may be due to the effects of the great recession which began in the year 2008.

Table 1: Advertising and Publicity Expenditure by Banks
(FY end 2009, 2010, 2014, 2015, 2016, 2017)

(Rs in 000's)

Sr. No.	Name of the Bank	Advertising & Publicity Expenses 31 Mar – 2009	Advertising & Publicity Expenses 31 Mar – 2010	Advertising & Publicity Expenses 31 Mar – 2014	Advertising & Publicity Expenses 31 Mar – 2015	Advertising & Publicity Expenses 31 Mar – 2016	Advertising & Publicity Expenses 31 Mar – 2017
	SBI AND ITS ASSOCIATES						
1	State Bank of India	33,67,605	3,37,766	27,82,569	28,46,361	30,76,406	60,02,887
2	State Bank of Bikaner & Jaipur	49,432	51,114	1,49,460	1,62,720	2,03,478	Merged with SBI
3	State Bank of Hyderabad	1,06,186	1,25,951	2,00,495	1,70,410	Merged with SBI	
4	State Bank of Travancore	39,925	85,995	1,18,317	87,433	1,29,823	Merged with SBI
	NATIONALISED BANKS						
5	Allahabad Bank	1,42,287	2,16,379	3,98,100	30,830	24,020	-
6	Andhra Bank	1,04,987	67,393	2,39,656	2,16,277	1,56,006	1,35,194
7	Bank of Baroda	3,99,692	4,44,622	8,15,805	8,45,180	8,34,988	11,13,956
8	Bank of India	2,24,354	4,74,742	-	-	4,09,524	4,50,024
9	Bank of Maharashtra	1,77,132	1,40,305	1,51,539	1,84,673	1,60,286	1,80,650
10	Canara Bank	2,38,259	1,98,597	6,63,440	4,42,752	4,15,067	3,03,501
11	Central Bank of India	1,53,322	1,72,155	-	2,54,425	3,09,297	-
12	Corporation Bank	1,64,787	1,82,547	1,81,560	36,881	53,582	46,668
13	Dena Bank	1,12,057	1,08,044	1,84,718	1,57,645	1,55,435	1,75,630
14	Indian Bank	88,622	1,06,315	-	-	8,12,190	73,643
15	Indian Overseas Bank	2,69,474	3,58,257	2,70,131	1,03,444	36,007	19,161
16	Oriental Bank of Commerce	1,38,670	1,17,339	3,08,612	2,61,810	1,81,600	1,79,485
17	Punjab & Sind Bank	3,750	5,365	21,709	22,381	14,368	14,843
18	Punjab National Bank	3,12,431	4,01,064	2,91,186	3,61,747	5,48,490	5,53,613
19	Syndicate Bank	2,25,210	1,73,703	2,60,197	2,76,995	3,12,758	2,96,994
20	Union Bank of India	13,26,298	3,89,842	5,52,908	6,31,863	6,92,501	6,69,832
21	United Bank of India	64,728	90,742	-	56,173	62,343	-
22	Vijaya Bank	88,763	50,460	1,09,049	1,03,603	-	-
23	IDBI Bank	4,83,793	4,58,356	4,02,356	4,15,654	2,44,166	4,36,083
	IMPORTANT PRIVATE BANKS						
24	AXIS Bank	4,63,177	4,72,694	9,59,548	9,05,679	9,35,725	14,11,326
25	HDFC Bank	11,18,992	8,60,190	14,35,610	18,74,691	25,84,338	20,95,018
26	ICICI Bank	14,02,840	11,08,010	18,34,023	16,16,197	21,09,728	28,80,587

Source: Annual Reports of Banks for 2008-09, 2009-10, 2013-14, 2014-15, 2015-16, 2016-17.

Table 2: Advertising and Publicity Expenditure as Percentage of Total Operating Expenses by Banks in Percentage (FY end 2009, 2010, 2014, 2015, 2016, 2017)

Sr. No.	Name of the Bank	(% Operating Expenses) 31 Mar – 2009	(% Operating Expenses) 31 Mar – 2010	(% Operating Expenses) 31 Mar – 2014	(% Operating Expenses) 31 Mar – 2015	(% Operating Expenses) 31 Mar – 2016	(% Operating Expenses) 31 Mar – 2017
	SBI AND ITS ASSOCIATES						
1	State Bank of India	**1.26**	**0.80**	**0.77**	**0.73**	**0.74**	**1.29**
2	State Bank of Bikaner & Jaipur	**0.63**	**0.57**	**0.74**	**0.92**	**0.98**	**Merged with SBI**
3	State Bank of Hyderabad	**1.14**	**1.28**	**0.88**	**0.60**	**Merged with SBI**	
4	State Bank of Travancore	**0.50**	**0.99**	**0.63**	**0.45**	**0.68**	**Merged with SBI**
	NATIONALISED BANKS						
5	Allahabad Bank	**1.02**	**1.37**	**1.02**	**0.73**	**0.60**	**-**
6	Andhra Bank	**0.95**	**0.50**	**0.79**	**0.56**	**0.53**	**0.39**
7	Bank of Baroda	**1.12**	**1.17**	**0.89**	**0.93**	**0.93**	**1.19**
8	Bank of India	**0.72**	**1.29**	**-**	**-**	**0.43**	**0.51**
9	Bank of Maharashtra	**1.84**	**1.31**	**0.63**	**0.73**	**0.13**	**0.15**
10	Canara Bank	**0.78**	**0.57**	**1.08**	**0.60**	**0.55**	**0.35**
11	Central Bank of India	**0.82**	**0.77**	**-**	**0.45**	**0.48**	**-**
12	Corporation Bank	**1.65**	**1.45**	**0.74**	**0.14**	**0.19**	**0.15**
13	Dena Bank	**1.46**	**1.27**	**1.12**	**0.85**	**0.68**	**0.77**
14	Indian Bank	**0.56**	**0.61**	**-**	**-**	**0.25**	**0.21**
15	Indian Overseas Bank	**1.38**	**1.45**	**0.72**	**0.24**	**0.25**	**0.11**
16	Oriental Bank of Commerce	**0.99**	**0.70**	**1.05**	**0.87**	**0.52**	**0.51**
17	Punjab & Sind Bank	**0.05**	**0.07**	**0.17**	**0.16**	**0.10**	**0.09**
18	Punjab National Bank	**0.74**	**0.84**	**0.06**	**0.07**	**0.55**	**0.59**
19	Syndicate Bank	**1.25**	**0.85**	**0.78**	**0.76**	**0.59**	**0.53**
20	Union Bank of India	**5.99**	**1.55**	**1.06**	**1.06**	**1.09**	**1.04**
21	United Bank of India	**0.66**	**0.84**	**-**	**0.31**	**0.32**	**-**
22	Vijaya Bank	**0.96**	**0.47**	**0.64**	**0.54**	**-**	**-**
23	IDBI Bank	**3.62**	**2.50**	**1.21**	**1.03**	**0.59**	**0.84**
	IMPORTANT PRIVATE BANKS						
24	AXIS Bank	**1.62**	**1.27**	**1.19**	**1.00**	**0.92**	**1.15**
25	HDFC Bank	**1.98**	**1.46**	**1.19**	**1.34**	**1.52**	**1.06**
26	ICICI Bank	**2.71**	**1.94**	**1.77**	**1.40**	**1.66**	**1.95**

Source: Annual Reports of Banks for 2008-09, 2009-10, 2013-14, 2014-15, 2015-16, 2016-17.

Table 3 analyses banks' total business and helps us identify their rank order. Advertisement and publicity certainly seem to have an impact on the total business, although, there will be multiple factors that contribute to these trends. Some bankers who were interviewed agreed that the bank business will suffer without advertisements. Therefore, it may be understood that advertising is necessary for a competitive advantage.

Table 3: Total Business of Banks (FY end 2009, 2010, 2014, 2015, 2016, 2017)

(Rupees in Crore)

Sr. No.	Name of the Bank	2008-09 Deposits + Advances = Total Business	2009-10 Deposits + Advances = Total Business	2013-14 Deposits + Advances = Total Business	2014-15 Deposits + Advances = Total Business	2015-16 Deposits + Advances = Total Business	2016-17 Deposits + Advances = Total Business
	SBI AND ITS ASSOCIATES						
1	State Bank of India	**1,28,457**	**1,43,603**	**12,40,898**	**2,87,819**	**31,94,422**	**36,15,829**
2	State Bank of Bikaner & Jaipur	**69,075**	**81,281**	**1,31,031**	**2,91,834**	**1,68,748**	**Merged with SBI**
3	State Bank of Hyderabad	**1,06,128**	**1,26,010**	**3,37,433**	**4,50,382**	**Merged with SBI**	
4	State Bank of Travancore	**74,642**	**89,344**	**165,56,0**	**3,18,538**	**1,68,123**	**Merged with SBI**
	NATIONALISED BANKS						
5	Allahabad Bank	**1,43,773**	**1,77,660**	**6,37,080**	**3,46,519**	**3,58,352**	**3,59,974**
6	Andhra Bank	**1,03,529**	**1,33,801**	**4,71,658**	**5,30,574**	**3,10,673**	**3,39,673**
7	Bank of Baroda	**3,35,648**	**4,16,079**	**17,67,969**	**20,49,109**	**9,57,808**	**2,67,318**
8	Bank of India	**3,32,617**	**3,98,252**	**15,18,914**	**17,90,238**	**8,72,194**	**9,33,820**
9	Bank of Maharashtra	**86,545**	**1,03,618**	**3,75,531**	**3,37,684**	**2,50,230**	**2,40,590**
10	Canara Bank	**3,25,111**	**4,03,986**	**13,19,822**	**15,25,665**	**8,37,284**	**8,04,506**
11	Central Bank of India	**2,16,755**	**2,67,490**	**8,15,358**	**4,50,539**	**4,56,337**	**4,49,679**
12	Corporation Bank	**1,22,496**	**1,55,936**	**6,15,201**	**4,95,422**	**3,45,493**	**3,60,916**
13	Dena Bank	**71,928**	**86,806**	**3,50,569**	**2,82,451**	**2,03,242**	**1,91,481**
14	Indian Bank	**1,23,978**	**1,50,373**	**2,86,634**	**2,98,057**	**3,10,918**	**3,14,654**
15	Indian Overseas Bank	**1,75,926**	**1,91,577**	**4,09,057**	**4,25,090**	**3,97,241**	**3,68,119**
16	Oriental Bank of Commerce	**1,66,869**	**2,03,746**	**6,37,421**	**6,81,839**	**1,63,500**	**3,85,777**
17	Punjab & Sind Bank	**59,291**	**81,794**	**2,64,041**	**2,92,554**	**1,56,527**	**1,45,803**
18	Punjab National Bank	**3,64,463**	**4,35,931**	**154,65,66**	**16,82,578**	**9,65,377**	**10,41,197**
19	Syndicate Bank	**1,97,417**	**2,07,432**	**7,19,180**	**8,44,365**	**4,68,185**	**4,67,626**
20	Union Bank of India	**2,35,237**	**2,89,355**	**9,98,539**	**8,28,618**	**6,10,074**	**6,64,857**
21	United Bank of India	**89,929**	**1,10,510**	**2,256**	**2,52,498**	**1,87,813**	**1,97,442**

22	Vijaya Bank	**90,003**	**1,03,453**	**3,72,583**	**4,18,839**	**2,14,426**	**2,27,559**
23	IDBI Bank	**2,15,845**	**3,05,868**	**8,56,882**	**9,01,158**	**4,81,613**	**4,59,363**
	IMPORTANT PRIVATE BANKS						
24	AXIS Bank	**1,98,930**	**2,45,643**	**12,53,478**	**1,19,615**	**6,96,742**	**7,87,448**
25	HDFC Bank	**2,41,694**	**2,93,235**	**12,06,305**	**15,16,190**	**11,10,672**	**11,98,208**
26	ICICI Bank	**4,36,658**	**3,83,222**	**12,53,479**	**11,19,701**	**8,56,690**	**9,54,271**

Source: Annual Reports of Banks for 2008-09, 2009-10, 2013-14, 2014-15, 2015-16, 2016-17.

From Table 3 we can draw the following conclusions:

1. ICICI Bank dropped from no. 1 in 2008–09 to 4th in 2016–17, and was replaced by SBI, followed by HDFC Bank.

2. Although ICICI spent more percentage on advertisement and publicity (1.95%) compared to SBI (1.29%), it is far behind SBI with respect to total business.

3. The banks with the lowest total business are Punjab and Sind Bank, Dena Bank, United Bank of India, Vijaya Bank, and Bank of Maharashtra.

4. The SBI advertising and publicity expenditure (percentage) has remained almost the same in 2017 (compared to 2009) but its business has improved.

5. In terms of total business, 7 banks out of 26 are ranked below 15 in all six years. If these 7 banks spend more on advertising in the future, they could possibly improve their business and their position.

Relationship Between Advertising and Publicity Expenditure and Total Business:

A Pearson Product Moment Correlation Analysis was initially conducted to determine the relationship between advertising and publicity expenditure by banks, and bank business for 6 years as shown in Table 4. From the results we can derive that in the years 2009, 2010, 2015, 2016, and 2017, the increase in advertising and publicity expenditure by banks has led to an increase in total bank business. The years 2009 and 2015 show low positive association, years 2010 and 2014 show moderate positive association. The years 2016 and 2017 show strong positive association. Of these, the correlation values for the years 2010, 2014, 2016, and 2017 were found to be statistically significant.

In order to see whether it was possible to predict the total business from advertising and publicity expenditure, regression analyses were further conducted. Again, it was found that it was possible to predict total business for the years 2010, 2014, 2016, and 2017. Details of the F values for the regression analyses can also be found in Table 4. We can see that there is high predictive ability when the correlation is strong; but it is difficult to predict total business in the years when its correlation with advertising and publicity expenditure is weak.

Table 4: Correlation between Advertising and Publicity Expenditure and Total Business of Banks

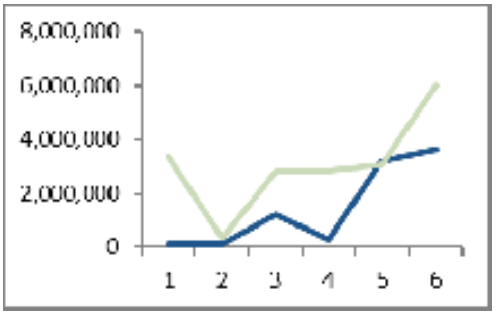
Year	Correlation Value	Significance	Regression F Value	Significance
2009	0.24	*NS*	1.48	*NS*
2010	0.67	0.01	20.19	0.01
2014	0.61	0.01	11.72	0.01
2015	0.27	*NS*	1.793	*NS*
2016	0.82	0.01	45.58	0.01
2017	0.91	0.01	89.38	0.01

Regardless of the significance, all trends are for positive relationships, suggesting that there indeed is an association in the amount spent by a bank on advertising, and the total business for that bank. For most years, this relationship allows us to predict the total business based on how much is spent on advertising. Figure 2 shows the trends followed by the total business, and advertising and publicity expenditure for each bank. From the charts we can see that for most banks, as advertising expenditure increases, the total business done also increases to some extent. There are some notable exceptions though, and at some points it may be seen that advertising expenditure has little to no impact, or perhaps even a negative impact on the total business.

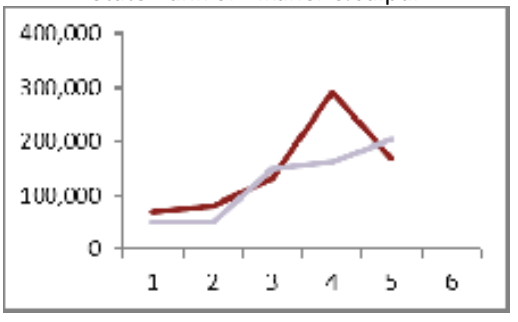
It may be that the type of advertising used is also important. At times a bank may create a huge campaign, but customers may receive the wrong message. Alternately, sometimes a bank may coast along on a minimal advertising strategy, but may be reaping the benefits of a previous marketing strategy, or positive visibility and word of mouth. Thus, even with a bare bones spending, some banks can experience a surge in business. A more detailed review of the type of advertising used, and the type of customer targeted will be required to understand the variations in these trends before us.

Figure 1: Trend of Advertising Expenditure to Total Business (Bank-wise)

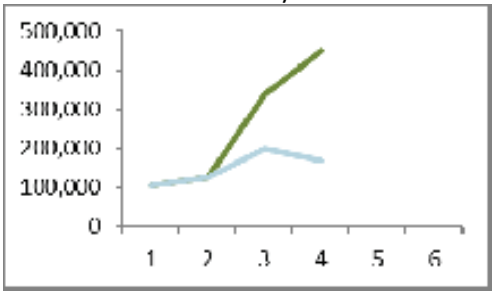
State Bank of India



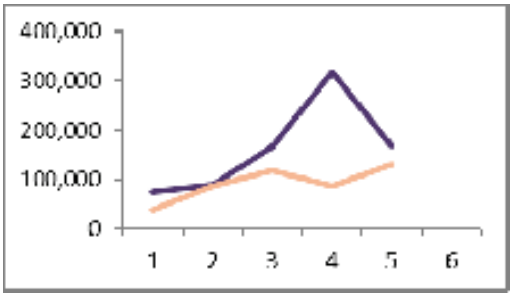
State Bank of Bikaner & Jaipur



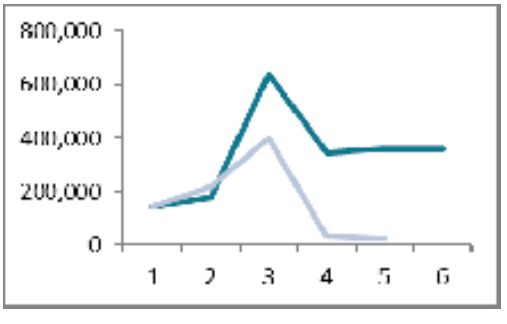
State Bank of Hyderabad



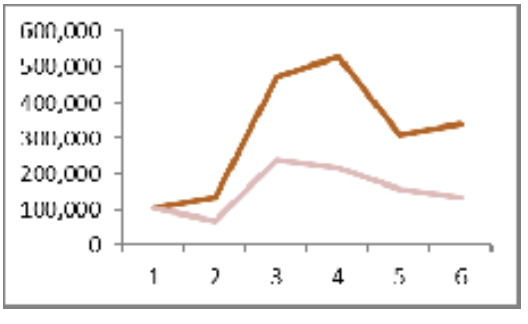
State Bank of Tranvancore



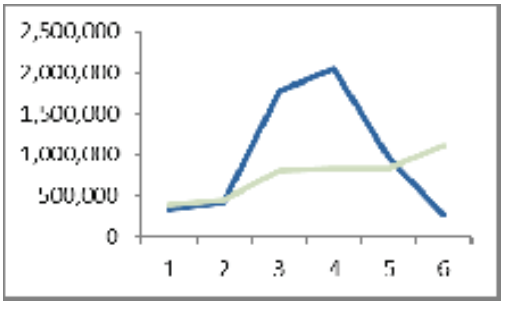
Allahabad Bank



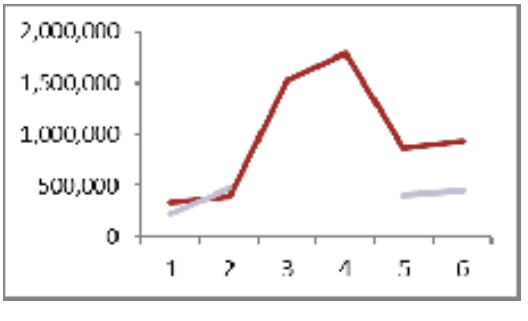
Andhra Bank



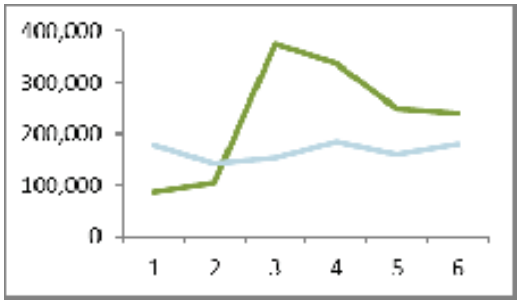
Bank of Baroda



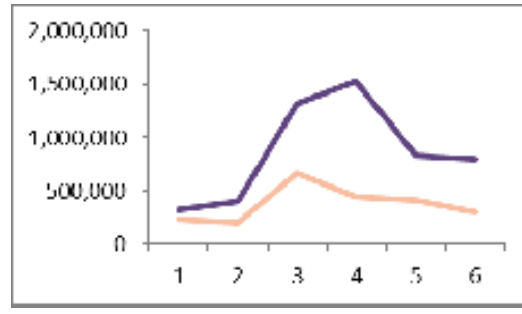
Bank of India



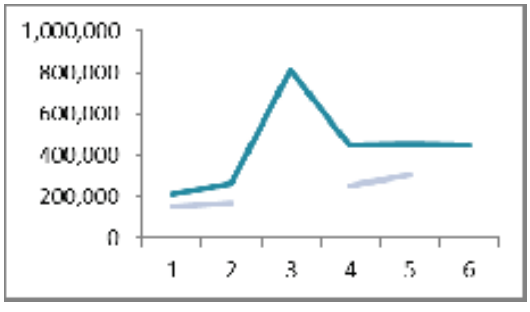
Bank of Maharashtra



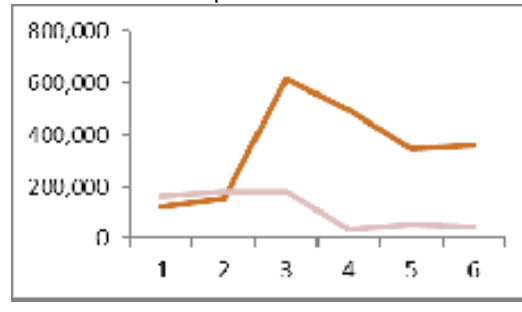
Canara Bank



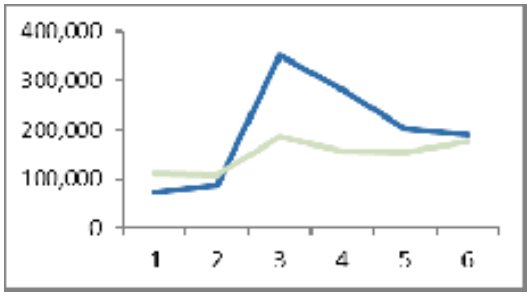
Central Bank of India



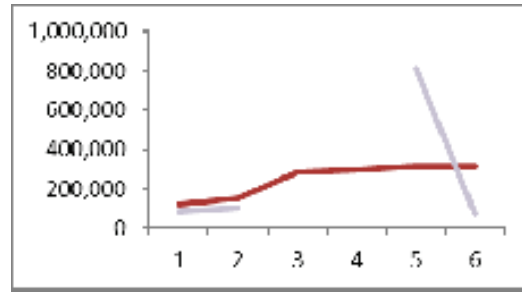
Corporation Bank



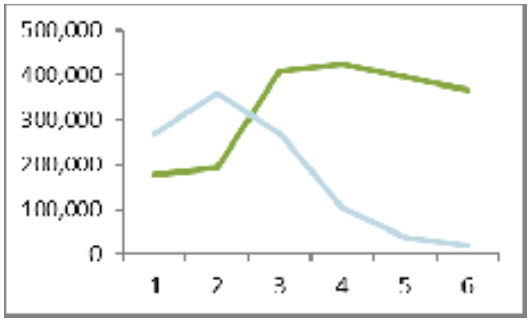
Dena Bank



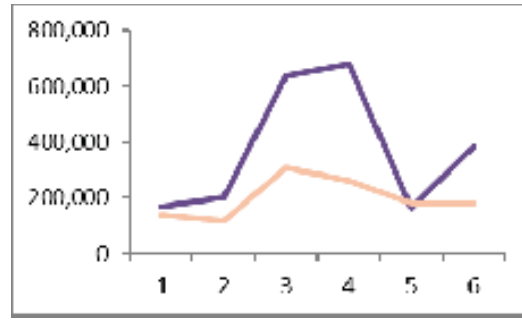
Indian Bank



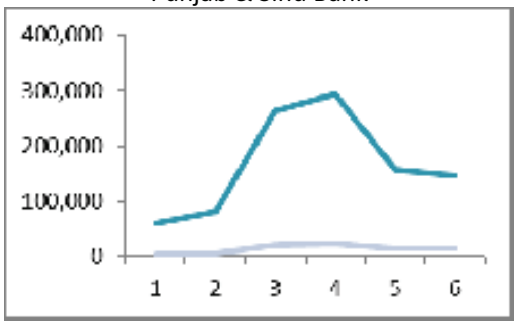
Indian Overseas Bank



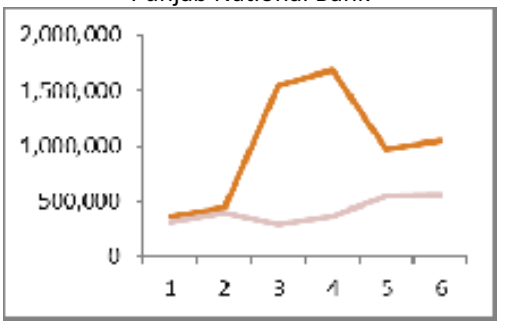
Oriental Bank of Commerce



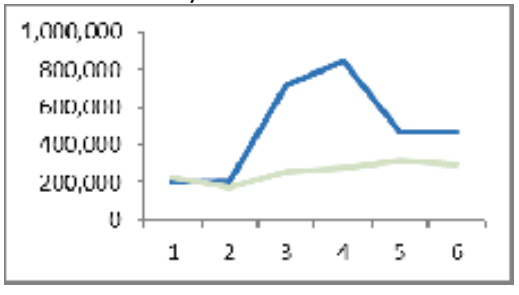
Punjab & Sind Bank



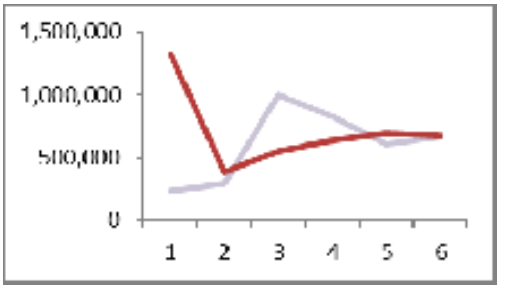
Punjab National Bank



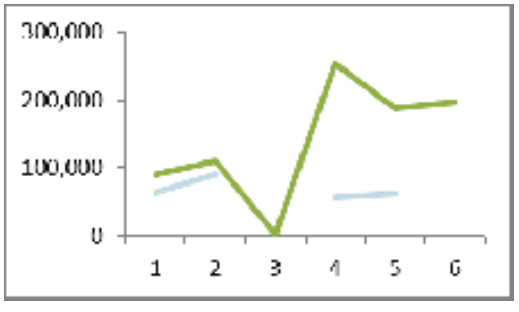
Syndicate Bank



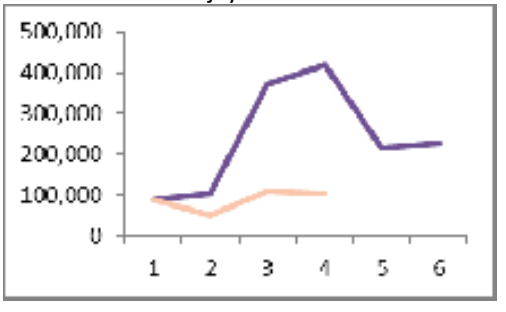
Union Bank of India



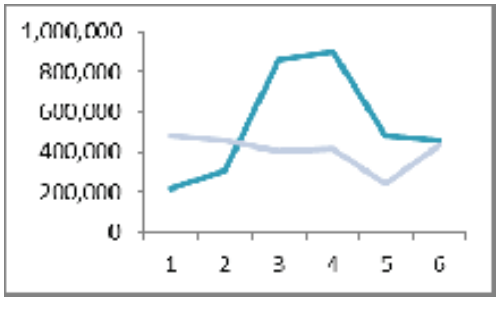
United Bank of India



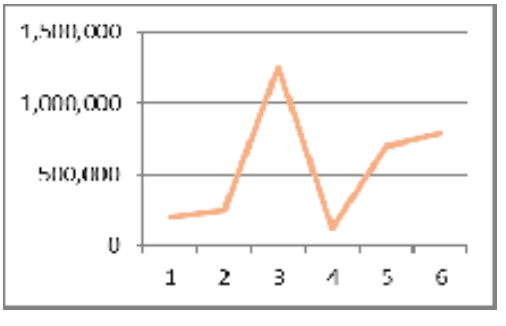
Vijaya Bank

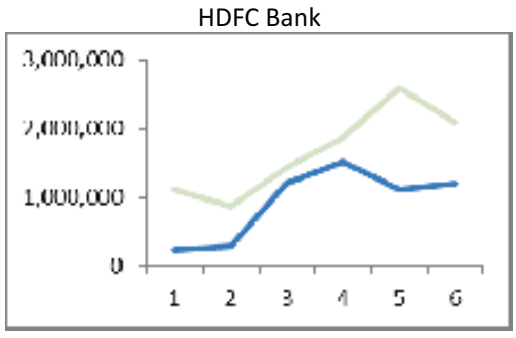


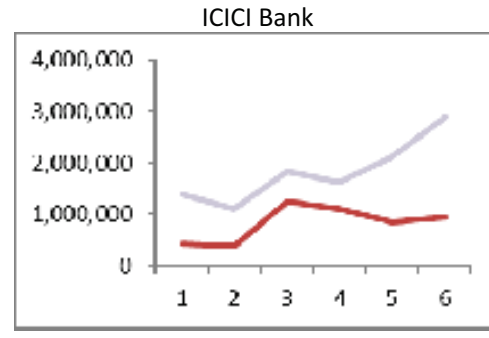
IDBI Bank



Axis Bank







It is important to note that national and international economic conditions will also play a role in how these relationships play out. Thus, it may be interesting to conduct further research to see how these trends play out in the context of larger movements in the economic climate. But, it can be said with some certainty that a bank's advertising expenditure and the bank's business for that year have a positive relationship. Often, it can be possible to predict a bank's total business from the advertising expenditure with some accuracy.

This suggests that if a bank were to increase its advertising expenditure, it would likely see a significant increase in its total business that year.

Opinion of Bank Employees:

The analysis of the questionnaires revealed the following:

1. The media most popularly used by banks for advertising are newspaper, hoardings, and television. Today online advertising is becoming popular. Movies, radio ads, and theatre are not popular media for advertising for banks.

2. All the respondents said that banks advertise their financial products — business loans, gold loans, credit cards etc. Other products advertised by banks include personal loans, life insurance, and educational loans.

3. 85 per cent of respondents believe that there is a positive relationship between advertisement expenditure by banks and bank business. According to them, good advertisements attract customers.

4. 96 percent of respondents said that banks give contracts for advertising to advertising agencies.

5. On questioning the respondents about what is more important to a bank — number of customers, or value of business or both — 32 percent respondents responded with 'number of customers', which is more important, 30 percent responded with 'value of business', which is important, while 38 percent responded with 'both', implying that customers and value of business are important to a bank.

6. 72 percent respondents agreed that using celebrities for advertisements helps to improve bank business.

7. 68 percent of respondents said that advertising is not a wasteful expenditure, while 32 percent were of the opinion that advertisement and publicity by banks was a waste and did not contribute towards bank business. They mentioned manipulative advertisements.

8. On being asked if India should not follow the policy of communist countries, where banks do not advertise banking products, 77 percent respondents disagreed and said that the bank business will fall if banks don't advertise.

9. 78 percent respondents disagreed with the suggestion of collective advertising by banks, even though the product differentiation among banks is very little. This suggests that they believe that the brand itself can attract customers.

10. Respondents were asked their opinions about the possible savings in resources, if advertising and publicity expenditure is not done by banks separately. Indian Banks Association (IBA) has being given the responsibility of educating customers of banks about various bank products. 72 percent respondents agreed to the above suggestion.

CONCLUSION:

Chamberlin refers to advertisements as 'selling costs'. This affects both, the average revenue/demand curve and the average cost curve. In a monopolistic competition, the average revenue curve will slope downwards. If the selling cost is a fixed percentage of sales the curve tends to be U shaped; but, the distance between the average revenue curve and the average cost curve will narrow. In the banking sector, it was found that the selling costs are almost a fixed percentage of operating expenses on advertising and publicity. The interest income, non-interest income, and operating expenses are all affected by the selling cost. Further research will be required to show further relationships between them.

Indian banks seem to be living in such a world. Banking being a common service, it becomes necessary for each bank to distinguish itself on the basis of factors like rate of interest, charges for some services, and service facilities.

According to Paul Samuelson (2010), "A characteristic feature of our era is advertising and publicity expenditure. A sizeable amount of the nation's creative talent is devoted to sales promotion". Advertising has its advocates who claim it has many economic advantages. The study shows that there is a positive correlation and predictive relationship between advertising and publicity expenditure by banks and bank business. Therefore, banks can spend more on advertising and improve their rank in the league of banks. From a public welfare perspective, the IBA can, as suggested, advertise some more common products to help with informing potential customers.

REFERENCES:

- Annual Reports of 26 Banks for 2008-09, 2009-10, 2013-14, 2014-15, 2015-16, 2016-17.
- Bhatt, S.S., & Gor, K. (2012). Recent Trends in Marketing Strategy in Banking Sector. *IBMRD's Journal of Management and Research*, 1, 46-48. ISSN (Print): 2277-7830, ISSN (Online): 2348 – 5922.
- Chamberlin, E. (1933). *The Theory of Monopolistic Competition: A Re- orientation of the Theory of Value*. Harvard University Press.
- Grankvist, A., Kollberg. C., & Persson, A. (2004). *Promotion Strategies for Banking Services* (Bachelor's Thesis). Lulea University of Technology. 2004: 152SHU, ISSN: 1404 – 5508, ISRN: LTU- SHU – Ex – 04/152—SE.
- Honka, E., Hortacsu, A., & Victorino, M.A. (2014). Advertising, Consumer Awareness and Choice: Evidence from the U. S. Banking Industry. https://www.ftc.gov/system/files/documents/public—/honkahortacsuvitorino.pdf .
- Kotler, P., & Armstrong, G. (2017). *Principles of Marketing*. New Delhi: Prentice – Hall of India Private Ltd, Ch. 1 & 8.
- Kurtz, David L. and Boone, Louis E. (2007). *Principles of Marketing*. Delhi: Thompson South – Western, Ch. 4, 10 & 16.
- Merve, A., & Huseyin, T. (2017). Advertising Effectiveness on Financial Performance of Banking Sector : Turkey case. *International Journal of Bank Marketing,* 35 (4), 649-661. http://doi.org/10.11.8/1JBM-03-2016-0036.

- Mylonakis, J. (2008). The Influence of Banking Advertising on Bank Customers: An examination of Greek Bank customers' choices. *Banks and Bank Systems International Research Journal, 3*(4). ISSN 1816- 7403 (Paper) ISSN online 1991 – 7074.
- Popli, G.S., & Vadgama, C. (2012). Role of Service Marketing in the Growth of Banking Sector in India. Shodhganga. inflibnet.ac.in. https://papers.ssm.com/sol3/Delivery.cfm/ ssrn_1D2055075_Code 1205280.pdf2.
- Riaz, S., Farqan, M., & Siddique, S.S. (2015). The Impact of Advertising on the Profitability of Public and Private sector commercial banks. *European Journal of Business and Management, 7*(8). ISSN 2222 – 1905 (Paper) ISSN 2222 – 2839 (online). http://dx.doi.org/ 10.4172/ 2151 – 6219. 1000191.
- Samuelson, P. A. (2010). *Economics: An Introductory Analysis*. London: McGraw Hill Book Company.

Book Review

Santro
The Car that Built a Company

Seema Bihari*

'There is no business as the car business"

This is not merely a quote on the back cover of the book, it's a feeling that any reader will experience when he reads this book. BVR Subbu takes the reader through the journey of bringing 'the sunshine car' into the already cluttered and competitive automobile market. This book provides certain strategies that are essential when a company thinks of venturing into foreign lands. Subbu has a Master's degree in Economics from Jawaharlal Nehru University. His entry in the automobile industry was purely by chance. His experience in Tata Motors Limited gave him a holistic understanding of the automotive industry and his learnings became useful when he was called on board as Director, Sales and Marketing by Hyundai Motors India (HMI).

This book is a recommended read for anyone who wishes to understand what it takes to make a car. Making a car is not just assembling nuts, bolts and sheets of steel together, there is a lot more to it. This book provides all the conditions that decide the fate of

Doctoral Student,
Institute of Management,
Nirma University,
Ahmedabad

an entrant in the automotive industry. The process of conversion of an idea into reality is captured beautifully across the book.

The book has eight chapters. The opening chapter of the book reinforces the importance of understanding the micro and macro environment in which the company is operating. The author has created a landscape of the automobile industry in India. He has time-lined the activities that led to the development of the market. Subbu has identified the different factors that are responsible for competition in the market. He has mentioned the initiatives taken by the Indian government and corporates to develop the automobile market. This chapter also highlights the dilemma of the Government of India. with regard to development of this industry. On one hand, there was a constant need of policies that would facilitate the development of the industry and on the other hand there was a desire to protect its home grown brand.

The changes in the regulatory policies opened up the Indian markets for foreign entrants , but the competition from home grown companies like Maruti Udyog Limited (MUL)was immense. MUL which was the baby of the Indian government was receiving constant support from the government. Many players like Tata Motors Limited, HAL, etc. were trying to compete with this carmaker, but their efforts were rarely backed with the kind of support that MUL had. This helped MUL to attain monopoly in the Indian market but little did it know that it would have to face fierce competition from a Korean company.

In the next six chapters, the author provides the step by step movement of Hyundai from being just a Korean car manufacturing company to becoming a market leader in the passenger car segment in India. Subbu has subtlety touched upon important strategies and management theories through his writing. In Chapters 2 and 3, he discusses the preparatory actions needed before the product reaches the market for consumption. He strongly recommends conducting a thorough analysis of the competition.

A businessman needs to have knowledge of the competitors' strengths and weaknesses. He also suggests that one should be similar to the best in the market and yet be different by learning from the shortcomings of the market leader. Subbu believed in maintaining cost competitiveness, while making the quality of the product was the major objective of HMI. He provides the details of all the operations of the company to fulfil this objective.

The customers' voice' is something that cannot be ignored. The moment a company starts to ignore the customer, there will be someone from the competition who will seize this opportunity to garner a larger share of the market. MUL had monopoly of the market but it

chose to ignore the voice of the customer. HMI explored different means to identify the problems of the customers, like taking feedback from the dealers or from the customers themselves. The designing of the product for the Indian market was done in consultation with the Indian consumer's feedback.

Throughout the book, Subbu has emphasized the importance of the customers in making a company successful and he suggests that companies should spend resources on developing a connection with the customer. It is important for an international company to be accepted by the customers as their own. There is a need to develop a feeling of mutual trust between the company and the customers. This can be done by associating with a cause in which the customers believe, but using this association for publicity can be disastrous.

Subbu's strategies were heavily influenced by his experience at Tata Motors Limited and Mao's dictum in "On Protracted War". He has quoted lines from Mao's dictum time and again. The author talks about how strategically aligning all the activities of the company can help to achieve its business objective. In the fourth chapter, he discusses the distribution system of HMI. He borrows from Mao's principle of attacking the enemy at isolated fronts first, and strategizes to start the distributorship from the least defended cities first.

He also speaks about being a strong headed leader so that the superiors are convinced of your ideas. He established strategically located, logistically well-developed dealership with full support of the Chairman. Subbu had observed that the dealers were not given due importance in the rival companies. He employed a different approach and focussed on development of a relationship of growth, trust and fairness between the company and its dealers.

As an industry grows, the markets develop, and the customers become knowledgeable; subsequently there would be new regulations to meet the need of the changing market. In the fifth chapter, the author provides the changes in the automobile industry in India and how these changes worked in favour of HMI. With the introduction of the EURO 2 norms in early 2000, all the players in the industry had to suffer a loss except HMI. The company's focus on maintaining a global standard of quality for all its products worked in its favour. "Focus" and "the urge to be a leader" were the driving forces for the company. All the changes in the products were made in consultation with the customers. HMI was both attacking and defending its market position at the same time.

Communication about the brand is an integral part of the process of building a brand. In Chapter 6, the author talks about what it takes to build a brand from scratch. Brand building

exercise for an unknown brand in any new market is a humungous task. Getting an appropriate advertising agency and brand ambassador is difficult and tricky. A new company would need a communication partner who believes in the company so that the message generated for the target audience is convincing.

HMI brought Saatchi & Saatchi as the advertising agency and Shahrukh Khan as the brand ambassador of Hyundai India, and this worked for the company. This happened because the advertising agency and the brand ambassador of the company had professional commitment and believed in the company's dream. The advertising campaign was successful as it aimed at earning trust of the customers. The author emphasizes that communication can also work as a strategy to attack the competition. He says that the use of comparative advertising isn't wrong because it makes the customer aware of the offering of different players in the market.

In the seventh chapter, Subbu explains the crucial role of the customers in pricing a product. He explains that the customers' willingness to pay is linked to the perceived value of the product in the minds of the customers. Any company that is able to convince the customer of the high perceived value associated with the company will be able to avoid the red ink in its balance sheet. He also suggests that pushing the product to the customers through price cuts is something that a company should avoid. This is a fatal strategy, since it can mentally block the customer to accept future price rises. He then gives the example of HMI's financial success. The operations at HMI were designed with the support of its pricing strategy. Every increase in price was backed by technological upgradation, which in turn was linked to the perceived value of the product and a greater willingness to pay.

In the closing chapter of the book, the author discusses the changes in the leadership, its effect on the working of the company and his decision to step down as the President of the company after spending 10 years with the company. Subbu has been critical in his writing, he has appreciated what was done right by the company and bluntly mentioned the short comings of the company. The "cultural difference" between Indian and Korean employees had started to show its impact on the functioning of the company. Most of the multinational companies had failed to mark their presence in the Indian market due to their arrogance. Cultural differences along with the lack communication between the management and workforce can lead to disturbance in the strongest of companies. HMI also faced organisational issues but the company's older self was restored in 2009 when Mr. Han Woo Pak took over the company.

The author suggests multinationals think twice before placing the leadership in the hands of someone of their own nationality. This leads to a lasting negative impact on the organization and also demotivates the middle or senior level employees with the professional ability to carry forward the culture built on competence and integrity. Subbu strongly believes that companies which look at India as a market to write off losses of the parent company, should not enter the Indian market. In order to survive in the Indian market a company needs to be committed and adopt ethical conduct.

This book can be a handbook of dos' and don'ts for companies venturing into the international market. Subbu has kept the book free of technical jargons, which makes it easy to read and comprehend. He has also presented the warlike situation faced by the automobile industry by quoting Mao's preachings in each of the chapters and has used words related to warfare as titles of the chapters. This unique writing style along with the blatant revelation about business strategies adds to the interest quotient of the book, making it a must read.

Guidelines to Contributors

1. Original research papers, articles, case studies, executive experience sharing, and book reviews on business and areas connected with management are welcome.
2. Two copies of the typescript, typed in double space on A4 size paper with adequate margins on all sides, should be submitted. The first page should have the title of the paper and name(s) of author(s) with institutional affiliation. The second page should start with the title of the paper, followed by text. Name(s) of author(s) should not appear anywhere in the text.
3. A soft copy of the typescript in PC compatible MS Word document format should be emailed to the editor at: nujbms.im@nirmauni.ac.in
4. The length of the paper including tables, diagrams, illustrations, etc, should not exceed 20 double-spaced pages. Short communications, book reviews, case studies / executive experience, sharing, etc. should not exceed five double-spaced pages.
5. The typescript should be accompanied by an abstract in about 100 words along with a declaration that the paper has not been published or sent for publication elsewhere.
6. All tables, charts, graphs, figures, etc. should be kept to the minimum. They should be given on separate sheets with sources indicated at the bottom.
7. All notes should be numbered consecutively and should appear as endnotes. These should be kept to the minimum. Notes in tables should be appropriately marked, and sources should appear at the bottom of the table.
8. References should be placed at the end of the text and should follow the author-date system. In the text, references should appear as (Bhagwati, 2000) or (Rao, 1974) etc. Multiple references to the same author for the same date should be displayed by suffixing a, b, c, etc. to the date (e.g. Rao 1974a, 1974b).
9. The style of referencing should be as follows:
   Books: Robbins, Stephen P, and Coulter, Mary (2002). *Management*. New Delhi: Pearson Education.
   Papers in journals: McGregor, D. (1957), "Uneary Look at Performance Appraisal," Harvard Business Review, 35 (1), 89-94.
10. All contributions will be subjected to peer review. The decision of the editorial committee will be final. Papers not accepted for publication will not be returned.
11. The author (or the first author if there is more than one author) of the published paper will receive a complimentary copy of the issue in which the paper appears along with 10 reprints.
12. Typescripts and all editorial correspondence should be addressed to:

Dr. Ashwini K. Awasthi
Chief Editor
Nirma University Journal of Business and Management
S.G.Highway, Ahmedabad 382 481, Gujarat, India
Tel: +91 79 3064 2000, +91 2717 241900-4, Fax: +91 2717 241916
Email: nujbms.im@nirmauni.ac.in
Website: www.nirmauni.ac.in/imnu

Nirma University Journal of Business and Management Studies is devoted to promoting research in business and management studies. A key objective is to equip practising managers and potential ones to make better decisions in their professional lives. It welcomes research based articles and cases in diverse areas of management. The journal aims to engage rigorously with practices, concepts and ideas in the field of management and emphasizes on providing managerial insight to a wide audience.

NIRMA UNIVERSITY
INSTITUTE OF MANAGEMENT
NAAC ACCREDITED 'A' GRADE

NIRMA UNIVERSITY JOURNAL OF BUSINESS AND MANAGEMENT STUDIES

Institute of Management, Nirma University
Sarkhej Gandhinagar Highway, Ahmedabad 382481, Gujarat, India
Tel: +91 79 3064 2000, +91 2717 241900-4, Fax: +91 2717 241916
Email: nujbms.im@nirmauni.ac.in
Website: www.nirmauni.ac.in/imnu