

# International Review of Business and Economics

Vol. 3

No. 1

November 2019

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# International Review of Business and Economics

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# International Review of Business and Economics

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Dept. of Business Administration, Asian University of Bangladesh*





## **SAYING GOOD BYE TO RETIRING PROFESSOR BANSI SAWHNEY, CO-EDITOR, IRBE**

Dear Friends:

Many of you have already met Professor Bansi Sawhney of University of Baltimore, or have read his work. I am here to inform you that Professor Sawhney has decided to retire from the formal academic life, even though he can never be completely retired from his activities. Professor Sawhney has efficiently served along with me for the journal activities for last 20 years, and our friendship has been alive of almost 30 years. Without his active support and advice this journal would not have been started nor has it been so prosperous in such a short time.

In fact the whole idea of starting a new journal has an interesting beginning. It could have been 1989 or 1990 in American Economic Association meeting in San Francisco, Bansi and I were having a dinner at our favorite Indian restaurant, and a subject of discussion drifted to the inefficient practice of journals all over the world, but especially in India. The treatment of authors who submit the paper in those days was pathetic. There was a little or no communication when an article was submitted to them. The refereeing process was scanty and obscure at best. We both conceptualized a journal that would be so efficient that it will answer all queries quickly, and inform the authors the exact progress of submission.



Fast forward to year 2000 when an Indian publisher requested us to start a new journal. We jumped on the opportunity and with some monetary contributions from our academic friends we started Indian Journal of Economics and Business (IJEB) that ran well for 12 years. We also conducted 5 professional conferences under the auspice of IJEB. As more demands were required to be met, we changed the name of the journal to International Review of Business and Economics (IRBE) and from 2016 IRBE is in existence. In all these years and for all these developments Prof. Sawhney was actively involved in decision and policy making. He has attended all conferences and has offered all kinds of help when requested.

As is evident from the information, Prof Sawhney completed his Economics PhD from George Washington University in Washington DC, and his research papers have appeared in national and international journals. He has done research in varied topics such as economic development, international trade, income inequality, budget deficits, crowding out, public debt, stock market and defense spending. From this voluminous research productivity, he received numerous research grants and awards. He was a recipient of the special Chair position, “The Harry Wright Distinguished Research Professor of Economics” at the Economics department of University of Baltimore from 2006 to 2013. He serves on the advisory boards of several organization. Besides being a prolific writer Prof. Sawhney was a tremendous teacher. He taught, besides usual principles of Macro and Micro classes, Managerial Economics, Business and Policy in a Global Economy and related other classes in more than 48 years of teaching. He also custom made two books for his courses. His long career is a testament of dedication, perseverance, integrity and sincerity in academic performance. For all these years he has been influential in enlightening several thousand students at the economics department of University of Baltimore. IRBE is honored to have a co-editor of his caliber and charm.

Prof. Sawhney will still be involved in academic work by supporting spread of basic education in India and other developing countries through a voluntary charitable organization, EKAL VIDYALAYA. Some day he would like to start a primary school in small village in Maharashtra state in India. Given his hard working attitude, sincerity and love for the cause we have little doubt that his life after retirement will be as successful in future. On behalf of all the friends of IRBE I wish him exciting days ahead. In the following section, Professor Sawhney’s main highlights of academic life are summarized.

## **Summary of Professor BANSI L. SAWHNEY's academic career.**

Last Position held: Professor of Economics  
Merrick School of Business  
University of Baltimore, Baltimore, MD

### **EDUCATION AND PROFESSIONAL QUALIFICATIONS**

#### **Education**

**Ph.D.**            George Washington University, Economics, 1975

**M.S.**            Indiana State University, Economics,            1968

#### **Academic Experience**

Professor of Economics, Department of Economics            1994-Present  
University of Baltimore, Baltimore, MD

Associate Professor of Economics (Tenured 1978)            1975-1993

Interim Chair, Department of Economics and Finance            1982-1984

Coordinator, Money & Banking Course            1975-1980

Assistant Professor of Economics            1971-1975

Graduate Teaching Fellow, Department of Economics            1968-1971  
George Washington University, Washington, D.C.

#### **Other Work Experience**

Executive Committee, AIEFS,(Elected Member)            2014-Present

Editor, Indian Journal of Economics and Business            2001-Present

Member, Advisory Board, European Jr. of EFA            2005-Present

Editorial Advisory Board , European Journal of Scientific  
Research.....2007- Present

Associate Editor, Social Engineer            1994-1997

Director, First Liberty Bank Corporation, Wash., D.C.            1988-1992

Editorial Board Member, Global Development Report            1987-1990

Founding Director, First Liberty Nat'l Bank, Wash., D.C.            1987

Editorial Review Board Member, Am Jr of Small Bus 1976-1986

### **Professional Development**

**Master Teacher Seminar—Dr. Harvey Brightman—Jan.17- Jan.18, 2012**

**Conference on Teaching and Research, AEA, May 2012, Boston, Mass.**

Two-week Seminar in “Faculty Development in International Business. 7/1993  
University of South Carolina

Courses Taken: International Finance  
International Business

Two-week Educational Seminar in Eastern and Central Europe, 5/1993  
organized by the Center of Post-Communist Societies.

University of Maryland

Purpose: To study the problems of former communist-block countries in  
transition to market economics.

Mini-conference/workshop on “Economic Reforms in India, Bangladesh, 5/1993  
and Nepal.” IRIS Center, University of Maryland

### **Professional Honors and Awards**

**Research Grant, REACH Program MSB, Summer, 2015**

**Service Award International Academy of Business and Public  
Administration Disciplines, Florida, January 2016**

**U.S. Department of Labor, Certification of Appreciation ( significant  
contribution to the O\*NET Data Collection Program), February 3, 2010**

**The Harry Y Wright Distinguished Research Professor of Economics, 2006-13**

**Black and Decker Research Award, MSB 2006**

Summer Research Grant, MSB, 2004, 2005

Black and Decker Research Award, MSB, University of Baltimore, 2002

**Special Recognition, Thirty Years of Dedicated Services,  
University of Baltimore, 2001**

--Distinguished Services Award, India Forum, Inc., March, 1998.

--Academic Achievement Award, University of South Carolina, 1993.

--Summer Research Award, Merrick School of Business, 1990

--Certificate of Award for Outstanding Achievement, World  
Academy of Cooperation, 1986

--Beta Gamma Sigma, 1984.

--CATO Associate, 1978, 1979.

--Award for Community Service, United Way, State of Maryland, 1978.

## **RESEARCH AND PUBLICATIONS**

### **Refereed Journal Articles:**

“The World Distribution of Military Spending: Is There a Convergence? International Journal of Computational Economics and Econometrics, (with Emmanuel and DiPietro), Inderscience Publisher, Switzerland, Vol.6, No.4, 2016

“Purchasing Power Parity between China and the U.S.: an Empirical Comparative Case Study” Journal of Business, Economics and Finance, vol.4 pp 38-51, 2015 (with Gidis, Mangir and Ertugrul)

“Growth Effects of Fiscal Decentralization: Empirical Evidence from Chinese Provinces” Emerging Markets Finance and Trade, (with Feridun and Jalil) Vol.50, No.4, pp .176-195.2014.

“The Deficit Reduction Debate in the U.S.: An Investigation of Co-integration and Causality.” International Journal of Revenue Management, (with Fatih Mangir) Vol. x; No.10, 2013

“Investment and Returns” Canadian Stock Market” SCMS Journal of Indian Management, Vol. IX , 2012 (with Anoruo and DiPietro)

“The Impact of Military Spending on Economic Growth: The Case of North Cyprus, Defense and Peace Economics 2011 (with Ferudin)

“Inflation Measures, Taylor rules and the Greenspan-Bernanke Years, Economic Quarterly, The Federal Reserve Bank of Richmond ( with Y. Mehra) 2010

”Stock “Market and Investment in Turkey: Evidence from Cointegration and Causality Tests. Economic Research/ Ekonomoska Istrazivanja, 2009 ( with Ferudin)

“Openness and Economic Growth in an Emerging Economy: The case of Russia,(with Ferudin), Economic Research/ Ekonomoska Istrazivanja, 2009

“The Effect of the Size of Military on Stock Market Performance in the U.S. and the U.K.” KYKLOS, (with DiPietro and Anoruo), 61, 2008.

“The Dynamic Interaction between Private Investment and the Stock Market: Evidence from Co-integration and Error Correction Models. *Applied Financial Economics*, (with Laopodis), 2007, Vol. 17, pp. 257-269

“The Effect of World Military Power on the Output of Nations, Southern Business and Economics Journal, (with DiPietro and Anoruo). Winter/Spring 2007.

“Military Size and its effect on the Distribution of Income in the United States,(with DiPietro, and Anoruo), *Economia Internazionale/ International* Vol. LX, May 2007

“The Long- run Relationship between Economic Growth and Stock Returns...”  
*Journal of Economics/ Ekonomicky Casopis*, Vol. 43, June 2006 ( with Emmanuel and Feridun)

“Stock Market Wealth and Income Inequality,” *Journal of Business and Economic Studies...Fall 2006 (with DiPietro).*

“The Impact of Chinese real exchange rate appreciation on India’s Trade and Investment” with Hung-gay and Zhang, *Indian Journal of Economics and Business*, December, 2006

“Economic Growth and Stock Returns: Some Causality Tests for Canada and U.S. *European Journal of Economics, Finance and Administrative Sciences*, Vol.2, No1, 2005

“Macroeconomic Determinants of the Income Shares of the Very Highest Income Groups” *Review of Applied Economics, January, 2005*  
*Review of Applied Economics*, vol. 1.2,2005

“The Determinants of the Very Highest Income Shares: the case of France,”  
“Determinants of Income Inequality of Upper and Lower Income Shares: Evidence from Cross Country Data,” *Indian Economic Journal*, 52, 2005.

“Fiscal Deficits and inflation in Portugal: A Long-term Perspective,” *Economia Internazionale/International Economics*, 2004, Vol.57, No. 1 February, 59-76.  
(With D. Tran)

“Investigating the Relationship between Stock Prices and Economic Growth: Evidence from Canada and the U. S.” *Proceedings of the 31st Northeast Business and Economics Association Conference* New York, 2004.

“Fiscal Deficits and Economic Growth in Portugal: A Long-term Perspective.”  
*Global Business and Finance Review*, Fall, 2003

Development and Inequality.” (with W. DiPietro) *International Economics/ Economia Internazionale*, August, 2002.

“Dynamic Behavior between Main Street and Wall Street. *Quarterly Review of Economics & Finance*, (with N. Laopodis) Volume 2, 2002.

“Foreign Investment, Externalities and Economic Growth in Less Developed Counties.” *Asian-African Journal of Economics and Econometrics*, June, 2002.

“Country Risk and the Distribution of Income.” *Prajnan, Journal of Social and*

*Management Sciences*, 3, 2001.

“China versus India: An Evaluation and Profile.” Social Engineer, (with W. DiPietro), January, 2002.

“Does Growth Cause Inflation? Granger Causality and Cointegration Tests: The Case of Portugal.” Economia Internazionale. (with D. Tran). Vol. LIII, August 2000.

“Does Growth Cause Inflation? Granger Causality Tests on 98 Countries.” Indian Economic Journal (with W. DiPietro). July-September, 1999-2000.

“An Economic Analysis of Corruption and Development.” The Social Engineer, Vol. 8, #1, Jan. 1999.

“Economic Policies and Economic Institutions: The Case of Transition Economies.” Business and Economics for the 21<sup>st</sup> Century (with W. DiPietro), Vol. II, 1998.

“Foreign Direct Investment and Economic Growth in the U.S.: Evidence from Co-integration and Granger Causality Tests.” International Review of Economics & Business, (with K. Kasibatla), June 1996.

“Public Debt, Deficits, and Economic Growth: A Cross-Country Analysis.” Southern Business and Economic Journal, (with W. DiPietro), Vol. 17, No. 4, July 1994.

“Exports, Imports, and Industrial Development: Evidence from Advanced and NICs.” International Economic Journal, (with H. Fung et. al.), Winter 1994.

“Determinants of Economic Growth: Does the Stage of Economic Development Matter?” International Review of Economics and Business, (with W. DiPietro and Jampani). 1993.

“Forecasting Foreign Exchange Rates: Which Model?” Indian Journal of Quantitative Economics, (with H. Fung), Vol. VIII, No. 1 & 2, 1992.

“Exports, Foreign Debt and Economic Growth,” The Indian Economic Journal, Vol. 38, No. 3, Jan.-Mar., 1991.

“The Product-Cycle Hypothesis and the Patterns of Market Power in International Trade.” Indian Journal of Quantitative Economics, (with W. DiPietro). Vol. 4, No. 2, 1989.

“Forecasting Techniques for Demand Deposits.” The Journal of Business Forecasting, (with J. Malehorn). Summer 1989.

“Government Deficits, Capital Flows, and Interest Rates.” Applied Economics, (with D. Tran), Vol. 20, June 1988.

“A Bank’s Fund Management system: Forecasting Techniques for Deposits. Hand Book of Bank Accounting and Finance, (with J. Malehorn), Shepard’s/McGraw Hill, 1988.

“Savings and Social Security: Is a New IRA Needed?” Bureau of Business Research, Vol. 3, No. 1, February 1983.

“Frequent Testing and Performance of Students in Introductory Economics: The Results of Several Experiments.” Condensed Version, Economics, (with V. Singh), Vol. XVIII, No. 77, Spring 1982.

“Monopoly Power, The Participation Theory, and International Trade.” Economica Internazionale, (with W. DiPietro), Vol. XXXIV, No. 1, February 1981.

“The Case for Deregulation in the Banking Industry.” Business Review, Vol. 1, June 1981.

“Economies of Scale in the Banking Industry: An Application of the Survivor Approach.” Asian Economic Review, (with W. DiPietro), Vol. 21, 1979.

“Business Failures, Managerial Competency, and Macroeconomic Variables.” American Journal of Small Business, (with W. DiPietro), Vol. II, October 1977.

“Capacity Utilization, Concentration and Price-Cost Margins.” Journal of Industrial Economics, (with P. Sawhney), (21), 1973.  
(Used in Professor Adelman’s reading list at MIT: Course: ECON 14.11; E 52-350, see American Economist, Spring 1975).

“Farm Supply Response: A Case Study of Bombay Region.” Asian Economic Review, February, 1968

**Books:**

**Business and Public Policy in a Global Economy, (ed.) Pearson Custom Library, 2015.**  
**Managerial Economics, Create.mcgraw-hill.com.**

**Non-Refereed Proceedings/Papers/Abstracts**

“Taxing Inefficient Vehicles is a better way to conserve” SUN, August 3,2001

“Liberatization, Foreign Investment, and Economic Growth.” Sundesh, 1993.

“Modern Money and Banking,” by Herbert M. Kaufman for Scott Foresman/Little, Brown, August 1988.

“Comment on “Income Elasticity of the Federal and State Fiscal Systems in India.” Atlantic Economic Journal, November 1975.

“Brief review on Income, Employment and Economic Growth, (by Wallace C. Peterson), published by W. W. Norton, 1975.

Abstract of the article, “Capacity Utilization, Concentration, and Price-Cost Margins,” published in The Journal of Economic literature, March 1974.

“Rural Credit and Development of Agriculture in India.” Express 1971.

**GRANTS AND CONTRACTS**

Nikko Merchant Bank, Singapore. Pricing and management of fixed income securities. 1991-1992. (with S. Nawalkha).

Center for Economic Education. Research in Teaching Principles of Economics. 1982.



## **WORKING PAPERS**

1. Foreign Debt and Economic Growth: Liquidity Constraint vs. Debt-Overhang
2. Relative prices, Capital Formation and India's Export Supply

## **Community Service**

Student Advisor, Harvard Model United Nations Delegation University of Baltimore, 1973-1975.

Hindi Teacher & Volunteer, GBT& CC 2005----Present

Chairman, Board of Hindi Education, GBTCC, 2005-6

Hindi Teacher, Greater Baltimore, CC, 2005.

Volunteer, GBT&CC, 2004, 2005

Chairman, India Forum, Inc., 1997.

President, India Forum, 1996.

Vice-President, India Forum, 1995.

Secretary, India Forum, 1994.

Treasurer, India Forum, 1992-1993.

Board of Trustees Member, India Forum, 1992

**Faculty Advisor**: Indian Student Club, 2004-2005

## **Professional Service**

Editor: Indian Journal of Economics and Business (IJEB) 2001-2012 and Co-

Editor: International Review of Business and Economics 2016-2019

External examiner, Ph.D & M.Phil Programs Quaid i-Azam University

Ph.D Thesis Examiner

## **Voluntary Simplicity and Materialism: Different Cognitive and Attitudinal Drivers and Different Effects on Self-Brand Connections**

**Vladimir Pashkevich<sup>1</sup>**

Assistant Professor, St. Francis College, Brooklyn Heights, New York, NY

### **ABSTRACT**

Although "simple" brands encouraging mindfulness and favoring minimalism are becoming popular at rapidly increasing rates, the relationship between consumer materialism or voluntary simplicity (VS) ideology and formation of consumer self/brand connections after exposure to the ads with materialistic or VS theme has not been studied and directly compared. The process underlying the formation of self/brand connections has not been empirically tested either. This paper addresses these gaps in the literature by using an experimental approach. The findings indicate that after exposure to the ad with VS (but not materialistic) appeal, voluntary simplifiers form strong bonds with the brand. On the other hand, materialistic consumers form strong self/brand connections when exposed to the ads with both materialistic and VS appeals. The findings show that both high materialists and simplifiers form brand connections when exposed to the ads with VS appeal, but for fundamentally different reasons. Materialism fosters self-brand connections by evoking thoughts about wisdom and good life, while voluntary simplicity fosters self-brand connections by evoking ad-related nostalgic thoughts and thoughts about equality. The results have important implications for brand managers trying to forge strong brand connections while targeting segments of consumers with different values.

**Key words:** materialism, voluntary simplicity, consumer self/brand connections, cognitive response, advertising

**JEL Classification:** C91 E21 M37 Z13

*On behalf of all authors, the corresponding author states that there is no conflict of interest.*

## INTRODUCTION

The connections individuals make between themselves and branded offerings, defined as personal connections between individuals and brands, such that consumer has included the brand in his or her self-concept, is an essential concept in consumer research and the practice of brand strategy. Multiple benefits of consumer self/brand connections to marketers are reported in the literature, such as improved brand loyalty and trust, brand advocacy, increased willingness to pay (WTP) a price premium, and greater tolerance of brand transgressions and negative brand information [MacInnis et al., 2009]. How and why consumers form (or do not form) consumer self/brand connections are questions that sparked curiosity of a number of marketing scholars [e.g., Moore, D.J. and P.M. Homer. , 2007; Escalas, J.E. 2004]. Research attempted to address these questions suggesting that consumer self-brand connections are driven by self-enhancement and self-concept maintenance motives [Escalas and Bettman 2003], or, in other words, suggesting that consumers recognize the symbolic nature of brands and their potential to serve as a signal of who they are and desire to be [Escalas & Bettman, 2009]. Research also suggested that self/brand connections can provide consumers with a sense of security. For example, Rindfleisch, Burroughs & Wong [2009] applied TMT (terror management theory) within the consumer research domain and demonstrated that existential insecurity can be a key factor in the formation of connections that consumers with higher levels of materialism forge with their brands. It was recognized that multiple positive consequences, such as improved consumer well-being, might result from consumer self-brand connections [Shrum, L. J. et al., 2013]. Two individual factors that can affect consumers predisposition to bond with the brands are materialism and voluntary simplicity [Wang and Wallendorf, 2006; Huneke ,2005]. A number of

conceptualizations of materialism have provided a foundation for the empirical research and shed some light on certain consequences of materialism. It was proposed that materialism is a personal value that reflects the high personal relevance of material possessions [Richins & Dawson, 1992], a personality domain that manifests itself as a wide range of behaviors that individuals undertake with respect to possessions [Belk, 1985], a focus on extrinsic motivators as financial achievements and social status [Kasser & Ryan, 1993], “both a means to achieving ends and a desired end state in itself” [Csikszentmihalyi & Rochberg-Halton, 1981], and a motivated goal pursuit directed at constructing and maintaining self-identity [Shrum et. al, 2013]. As materialism research evolved, different paradigms [Shrum et. al, 2013] emerged in explaining materialism and its antecedents and consequences. The present research adopts definition of materialism as a personal value that reflects the high level of importance assigned by consumers to material possessions. The predominant focus of materialism research was, traditionally, on consumer connections with the brands they currently own and on understanding consumer connections as a means of buffering existential insecurity among materialists [Rindfleisch, Burroughs & Wong, 2009]. This paper addresses a significant gap in the marketing literature by studying the relationships between materialistic and VS values and formation of consumer self/brand connections after exposure to the ad. In addition to exploring how materialists form self/brand connections, with the recent interest in a topic of voluntary simplicity [Elgin, 2010], this paper seeks to contribute to the literature by developing and experimentally testing a model explaining how voluntary simplifiers form self/brand connections upon exposure to marketing messages. Voluntary simplicity ideology came into being in the 1970s. The assumptions on which this ideology is based—minimalism, environmental knowledge and ecological motivations, and commitment to self-improvement [Elgin and Mitchell 2003]—are subordinated

to the principle of self-limitation [Kasperek, 2017]. While simplifiers engage in “consumption downshifting” and have tendency to choose time over money (i.e., “work downshifting”), and, as a result, voluntary simplicity is frequently treated as an extreme form of anti-consumption ideology, this paper recognizes that it is virtually impossible for a citizen to exist outside of the marketplace and there is a rapid increase in a number of brands reflecting VS ideology. Therefore, the current study encompasses an expanded view of voluntary simplicity that recognizes that simplifiers are also consumers to whom many "green" or "simple" brands are being marketed and, therefore, there is a critical need to understand if and how simplifiers form self/brand connections. Major gaps exist in the literature as no one has examined the effects of VS ideology on consumer self/brand connections post exposure to advertising. In addition, no one has directly compared the effects of materialism and voluntary simplicity on self/brand connections and the role of underlying processes in the formation of self/brand connections. This paper addresses these research issues.

This study seeks to advance our understanding of whether, why, and to what extent different marketing messages may foster the formation of consumer self/brand connections among consumers with high levels of materialism and voluntary simplifiers. The paper posits that an ad with voluntary simplicity theme will facilitate self/brand connections among both consumer with higher levels of materialism and voluntary simplifiers but the underlying mechanisms are expected to be different. Specifically, in line with past research which has already established that messages that are congruent with individual predispositions are more effective [Kivetz 2005, Mitchell, Kahn, and Knasko 1995], it is predicted that an ad with VS theme will effectually foster consumer self/brand connections among simplifiers because it elicits nostalgic thoughts and thoughts about equality, both congruent with VS ideology. In contrast, the same ad will

facilitate consumer self/brand connections among individuals with higher levels of materialism because it evokes thoughts about wisdom and good life and, therefore, enables materialists to ascribe transformative powers to the brand advertised. Therefore, the findings indicate that materialistic consumers develop bonds not only under condition of existential insecurity, as past research has shown [Rindfleisch, Burroughs & Wong, 2009]. This paper also posits that an ad with materialistic theme will foster the formation of consumer self/brand connections among materialists for the same reasons: it will elicit thoughts about wisdom and good life. However, the ad with materialistic theme will be ineffectual to facilitate self/brand connections among simplifiers because of its incongruity with VS ideology. While formation of consumer self-brand connections has been observed among materialists, this paper is the first that reports such observations among voluntary simplifiers.

The study tests the effects of materialism and voluntary simplicity on consumer self/brand connections using a lab experiment and examines the mechanisms underlying formation of self/brand connections after exposure to the ads with either VS or materialistic themes. The paper is the first one that directly compares different cognitive and attitudinal mechanisms of forming brand connections among materialists versus simplifiers.

## **THEORETICAL MODEL AND HYPOTHESES**

### **Consumer Self Brand Connections**

Consumer self/brand connections (SBC) refers to the degree to which an individual has integrated a brand into one's overall sense of identity [Escalas and Bettman, 2003]. People are motivated to develop and maintain subjective concepts of themselves [Swann & Bosson, 2010] and SBC construct reflects that the development, validation and maintenance of the self-concept is one of the driving forces behind brand acquisitions. With true self/brand connections,

consumers have a close relationship with the brand such that they actively seek different means to interact with the brand and engage in various pro-brand behaviors [Batra, Ahuvia, & Bagozzi, 2012]. Building strong consumer/brand relationships is one of the main goals of brand managers [Ahluwalia, Burnkrant, & Unnava, 2000]. Self-brand connection (SBC) may mitigate detrimental effects of brand tainted reputation due to decreased perceived brand quality and declining trust [Gerzema, 2009]. The challenges arise from aligning a variety of consumers' identity motives, such as a verification a positive self-concept or an influx of a feeling that one's life is meaningful into the working self-concept, with brands that can potentially help to signal these positive identities [Belk, 1988]. Individual factors behind the identity motives may influence a propensity to form bonds with the brands. This paper explores how two types of personal values, materialism and VS ideology, shape consumers self/brand connections.

### **Consumer Materialism**

A number of conceptualization of materialism can be found in the literature. Belk [1985] views materialism as an amalgam of the personality predispositions of greed, jealousy, and nongenerosity. Kasser [Kasser, 2002] discusses materialistic behaviors as extrinsically motivated, as opposed to behaviors addressing intrinsic motives such as competence and growth. The concept of instrumental and terminal materialism was introduced by Csikszentmihalyi and Rochberg-Halton [1981]. A defining characteristic of instrumental materialism is the acquisition and use of possessions that enable people to advance towards satisfying the needs described by Maslow and others, such as safety, belonging, and esteem. Conversely, terminal materialism is manifested when the acquisition's one and only goal is to keep consciousness organized and focused on some activity that requires attention as a way to fill worrisome emptiness that is diffused through consciousness when consumer is not occupied by any task.

According to Csikszentmihalyi [2000], shopping and accumulation of possessions is a relatively easy way to manage purposelessness, anxiety and the existential vacuum. Unlike instrumental materialism, terminal materialism is considered detrimental to well-being as shopping, using social media or trying to avoid the purposeless state when there are no tasks to complete with some other passive consumption activities does not help to improve well-being, as people report being happier when they are involved in an intellectually stimulating activity, such as reading, writing, painting, working on craft hobbies projects, or solving mathematical problems [Csikszentmihalyi, 2000]. According to Shrum, L. J. et al. [2013], the function of materialism is the verification and enhancement of the self. Accordingly, brands link consumption with a variety of identity motives identified by Vignoles, et al. [2006]: self-esteem, continuity, distinctiveness, belonging, efficacy, and meaning. Shrum, L. J. et al. [2013] proposed that the function of materialism is to verify and enhance self-concept, which is accomplished through symbolic consumption. Acquisitions may serve as a self-signal or other-signal, e.g. an expensive handbag may be used to signal to others that one has economic capital and the discriminating eye of the person with a high social status or an expensive handbag may be acquired as a self-signal that indicates, "I am an accomplished person and I am good at what I do." This is a broad, inclusive conceptualization of materialism that clarifies how certain aspects of materialism may relate in some cases to increased well-being. Shrum, L. J. et al. [2013] further theorize that increased materialism leads to diminished subjective well-being only insofar as acquisitions are performed with the explicit purpose of self-enhancement through other-signaling. Shrum L. J. et al. [2013] conceptualization of materialism encompasses Csikszentmihalyi's [2000] concept of instrumental materialism as two have overlapping areas. The materialism-induced individual practices have been widely researched following theoretical and empirical approaches suggested



by Richins and colleagues [Richins, 2011; Richins & Dawson, 1992], which regard materialism as “a set of centrally held beliefs about the importance of possessions in one’s life.” This approach views materialism as a value [Rindfleisch, Burroughs, and Wong, 2009], which is a manifestation of a well-established paradigm picturing values as goal-directed cognitive structures that exerts normative and cognitive pressures toward conforming to specific value frameworks. Accordingly, consumers may be motivated to foster self-brand connections because they hold transformation expectation, which, according to Richins [2011, 145], is “the belief that one’s self or one’s life will be changed in a significant and meaningful way by the acquisition and use of a product.” According to Richins [2011], materialists are more inclined than nonmaterialists to believe that individual consumer behavior reform through purposeful acquisitions will allow them to transform into an ideal person they want to be, enable them to have a more meaningful life, and enable them to practice wisdom with which they carry out daily tasks [Mick, Spiller, and Baglioni, 2011].

It is proposed here that materialists can exhibit equal propensity to form connections with the brands conveying materialistic or VS values because they can contribute equally to the construction (or maintenance) of an ideal identity. Thus, when exposed to the ads with either materialistic or VS themes, consumers with higher levels of materialism will see the brand as an instrument of self-enhancement or self-maintenance. Consumers with higher levels of materialism believe that people’s acquisitions can say a great deal about who they are [Belk, 1988] and, as a result, often display acquisitions as a signal (to others or to themselves) of desired identities [Shrum, L. J. et al., 2013, Richins, 1994]. Hence, based on these literatures, it is hypothesized that:

**H1:** The interaction between consumer materialism and advertising appeal will affect consumer self/brand connections, such that:

**H1.1** Consumers high levels of materialism form stronger self/brand connections than consumers with low levels of materialism after an exposure to either voluntary simplicity or materialism themed ads

**H1.2** Consumers with low levels of materialism form stronger brand connections than consumers with high levels of materialism after exposure to a voluntary simplicity themed, but not materialism themed ads.

### **Consumer Voluntary Simplicity**

This study also stresses the need for developing a better understanding of the role of consumers' identity-related motives in explaining the relationship between a voluntary simplicity (VS) ideology and self/brand connections. The VS movement, the core principle of which is self-limitation, came into being in the 1970s and was popularized by Duane Elgin [2010, 2009,1993], one of the earliest promoters of the VS ideology. This ideology became an important topic of public debate during the time of youth's countercultural rebellion, which was a new wave of the ideological disagreement over consumer culture in industrial society [Kasperek,2017].

Consumers embraced the culture of consumption while participating in the market economy, which have had a transformational impact on economic stability and success. However, consumer's culture is often conceived and a culprit responsible for the problems caused by excessive consumption and over-commercialization: intentionally visible consumption does little to improve people's quality of life and may not be an appropriate path toward environmental sustainability. It has been argued that the growing rates of acquisition of consumer goods has resulted in self-centered, opportunistic consumers, seeking self-identification and gratification

through goods at the expense of altruistic motivations and concern about environmental protection [Horowitz, 2004]. The basic tenet of VS ideology is that through reducing overall consumption levels, consumption can maximize positive lifestyle benefits while transcending individualism in line with altruistic motivations, environmental, social and political, and to lead a life that has more meaning and purpose [García-de-Frutos et al., 2019]. Empirical findings indeed showed that voluntary simplifiers engage in downshifting practices by limiting consumption and “choosing personal growth over economic growth and time over money” [Nelson et al., 2007]. However, as Arnould [2007] has asserted, consumers can’t escape the marketplace. Furthermore, Maniates [2002] argues that the VS philosophy is commodified as ecological products and “simple” consumption items are being marketed sometimes with excessive zeal. While simplifiers distrust the marketplace, they still must acquire, own, and dispose. As such, it is possible that while simplifiers misdoubt the marketplace, they may place great confidence and trust in the brands that resonate with VS ideology. As such, there is a need to explore this possibility. Some researchers speculated that consumers seeking to engage in VS lifestyle must disregard the notion of a brand been capable of reflecting associations congruent with an ideal consumer identity, [Belk, 2007]. For example, Nelson et al. [2007], in agreement with Etzioni [1998], suggest that voluntary simplifiers value goods for function and not for the symbolic nature of the acquisitions. This may suggest that simplifiers, by resisting certain marketing practices and facilitating other marketing practices, in a way, support consumer culture, in a manner distinctly different from the general population. It is suggested in this paper that despite holding consumption beliefs and values distant from the ones held by other average mainstream consumers, particularly consumers with high levels of materialism, voluntary simplifiers have both self-oriented and other-oriented symbolic motives to connect with brands

so that their acquisitions can signal their values to the self or to others. Thus, simplifiers foster connections with the brands reflecting voluntary simplicity values while engaging in “moral identity work” [Johnson, 2004]. Politicizing of consumption transforms simplifiers into individuals who consciously choose brands that fit with the simplifiers desired self-concepts—and who habitually ask how the brand allows to express personal ideological concerns. According to Sandlin & Walther [2009], simplifiers draw from a wide variety of moral doctrines while defining themselves as “worthwhile and good people” [Grigsby, 2004, p. 20]. When there is incompatibility between mainstream consumer ideology and ethical consumer ideology such as VS, a strong identification with one group can result in developing a reflexive distance from the other. Thus, individuals who adopted VS lifestyle are less likely to identify with the wider culture of consumption. Furthermore, simplifiers are determined to reconstructing their identities as moral agents who resist the dominant contemporary ideology of western consumerism. Therefore, simplifiers’ moral-agency-as-resistance leads to refusing mainstream, status-quo brands and becoming connected to the brands with new identities, which represent new forms of subjectivity influenced by voluntary simplicity philosophy, namely, living a life of purpose. Therefore, it is proposed here that voluntary simplifiers have a greater propensity to form strong brand connections when exposed to the ads with VS theme (but not materialistic theme) than non-simplifiers; this difference will be especially pronounced for the brands that can be thought of as a means of reinventing a sense self as moral agents, an identity which simplifiers are striving for.

Hence, based on these literatures, it is hypothesized that:

**H2:** The congruence between voluntary simplifiers' values and advertising theme will strengthen consumer self/brand connections, such that:

**H2.1** Voluntary simplifiers form stronger self/brand connections after exposure to a voluntary simplicity themed ad, but not materialism themed ad.

**H2.2** Individuals with lower levels of voluntary simplicity values form self/brand connections of the same strength after exposure to either voluntary simplicity or materialism themed ads.

### **AD-EVOKED THOUGHTS AND ATTITUDE TOWARD THE AD (Aad)**

The theorizing presented earlier in this paper suggests that consumers with higher levels of materialism seek connection to the brands featured in the ads with either materialistic and VS theme, while consumers with high levels of VS seek connection to the brands featured in the ads with VS theme only. What remains to be examined is whether and/or how different cognitive responses will influence this ad theme -> self/brand connections relationship. Extensions of this framework focus on obtaining a more complete understanding concerning the cognitive and attitudinal pathways through which ad themes foster and solidify consumer self/brand connections.

Although there are some similarities in the way consumer materialism and voluntary simplicity interacts with the advertising theme when consumer self- brand connections are formed, the underlying cognitive and attitudinal mechanisms could be quite different.

### **Materialism and Cognitive Responses**

When encountering a message that resonates with their identity motives, individuals with high levels of materialism are likely to form self/brand connections based upon the belief that the

brand can improve their everyday life, contribute to successful social relationships, foster a favorable self-perception, or assist in the pursuit of the life of contentment and happiness, or enhance the effectiveness with which they carry out daily tasks [Richins 2011]). The tenets of Network Theory [Anderson 1976; Collins and Loftus 1975] in conjunction with the elaborative and organizational properties of the self-structure in memory [Symons and Johnson 1997], provide contribution to explaining the causal linkage between these beliefs and the formation of self/brand connections. According to the Network Theory, the ad with both materialistic and VS theme is expected to activate a more extensive associative network in individuals with high (but not low) levels of materialism [Baker and Kennedy 1994]. For example, when a person with high level of materialism evaluates an advertised brand favorably because they satisfy intrinsic goals related to personal growth, that individual will experience an activation of a strong network of associations and memories pertinent to that personal goals. For consumers with higher levels of materialism, aroused associations are expected to be salient and easily retrievable due to their relevance to achieving important personal goals. Applying Network Theory assumptions in the ad exposure context, to the extent that consumers with high levels of materialism expect that the brand will enable them to achieve goals motivated by the self [Richins, 2013; Richins, 2011; Escalas & Bettman, 2005], they are likely to experience salient ad-evoked thoughts.

### ***Ad-Evoked Thoughts about Wisdom***

After the concept of "practical wisdom of the consumer" was proposed by Mick and Schwartz in 2012, a stream of research was formed devoted to exploring various forms of rationalization and control that consumers are beginning to show in consumption behavior. This work culminated in the field's first empirically grounded theoretical framework of consumer wisdom allowing to

understand, maintain, and improve consumer well-being. Wisdom is defined as quality enabling someone “to do the right thing in the right way for the right reasons” to live a good life [Schwartz & Sharpe, 2010] and, therefore, is thought of as a prerequisite for a good life. In addition, according to one of the predominant paradigms of sociopsychological research, wisdom’s leading objective is well-being, which is encompassed by a combination of the physical, economic, socio-cultural, psychological, emotional, political, and spiritual dimensions of life [Masmoudi, 2016; Ryff, 1989]. Invoking Sternberg’s balance theory of wisdom [1998], Luchs and Mick [2018] described a wise individual as “a good decision maker who effectively balances heart and mind, is concerned as much with the future as with the present, and considers others’ needs as well as their own.” Luchs and Mick [2018] indicated that being wise enables consumers to play a more constructive and influential role in improving well-being for themselves and for others. Although the consumer is emerging as one of the central constructs in the field of consumer studies, no paper to date have empirically explored this construct in an advertising context. The present study begins to address this research void.

According to Dunn et al. [2011], Rindfleisch et al. [2009] and Mick et al. [1999], individuals with higher level of materialism are motivated to form meaningful and personal connections between themselves and a given brand in order to gain a sense of direction and purpose. These empirically grounded theorizing leads to the proposition that both ads with materialistic and VS theme have a potential to activate strong self/brand connections if they are able to evoke thoughts about wisdom since felt wisdom often provides a fulfilling sense of purpose in life. The wisdom experienced when exposed to the ad is not ‘lived’ wisdom per se, but instead is wisdom that is experienced through others, e.g. through identifying with a model featured in the ad. Therefore, in case of consumers with high levels of materialism, the consumer/brand connections

after exposure to the ad are expected to be formed when the ad evokes thoughts about wisdom. Thus, the first pathway toward consumer/brand connections among materialists hypothesized here is: Ad Exposure -> Ad-evoked thoughts about wisdom -> Consumer/Brand Connections.

### ***Ad-Evoked Thoughts about Good Life***

The happiness dimension of materialism, as defined by Richins [1992], in conjunction with a goal-pursuit function of materialism [Shrum, L. J. et al., 2013] leads to the proposition that consumers with high levels of materialism would foster self/brand connections in order to help themselves to become *happier* and to verify and/or enhance their self-concept. Hence, any ad offering a consumer an opportunity to bolster one's self concept is likely to evoke the thoughts about good life. Interestingly, emerging research [Mick and Schwartz, 2012; Luchs and Mick, 2018] points out that deficit of wisdom or informed judgment plays a crucial role in the deterioration of individual well-being [Mick and Schwartz, 2012]. It is proposed here that thoughts about good life will be preceded by thoughts about wisdom since in order to experience evoked thoughts about good life, materialists should believe that the advertised brand can transform the way they perceive themselves into a wiser person, the one who possesses efficacy, has distinct values providing guidance, and someone in touch with traditions [Richins, 2011; Vignoles et al., 2006]. The good life can be actualized by forming connections with the brand which is imbued with the aura of wisdom which, in turn, fosters self/brand connections among materialists.

Kross and Grossmann's [2012] work showed that having lab participants respond to the VS ad motivates them to take less egocentric viewpoints, adopt a "big picture" perspective, and think more holistically, all of which are dimensions of consumer wisdom as described by Luchs and Mick [2018]. These authors have shown that greater "distance from self" encouraged intellectual



humility, cooperation, and openness to diverse viewpoints. Thus, exposure to the ads with VS theme can stimulate distancing from the self which, in turn, evokes thoughts about wisdom, which is a prerequisite for a “happy life.”

It is also predicted here that because of the goal-pursuit function of materialism, the wisdom dimensions such as intentionality, contemplation, and emotional mastery will surface when consumers with high levels of materialism are exposed to the ad with materialistic theme. This prediction is also supported by the Luchs and Mick [2018] findings that a consumer can be wise without any necessary allegiance to the voluntary simplicity ideology. Because there is a negative stereotype of “materialistic” people [Fournier & Richins, 1991], the desire to acquire and display material possessions may lead materialists to search for the balance theme in the ads with materialistic theme that alludes to wisdom as a middle ground between the hedonism of materialism and the asceticism of denial [Luchs & Mick, 2018]. And because there is a positive stereotype associated with “Voluntary Simplicity” people [Luchs & Mick, 2018], the acquisition of brands advertised with VS theme may enable people, regardless of their values, materialistic or VS, to view themselves in a favorable light, as someone who possesses wisdom. This is because consumer wisdom, as proposed by Luchs & Mick [2018], encompasses aspects of VS through its “mission to advance the common good, and through its Transcendence facet and interbeing dimension.”

Thoughts about good life are positively charged similar to thoughts about wisdom and they are connected to the ‘imagined’ broad life outcomes such as life satisfaction and overall wellbeing. Therefore, the exposure to the ad evokes ‘idealized’ images of the future and therefore, largely favorable in nature.

The downstream effects of this process on ad attitudes and self/brand connections for consumers high on materialism is predicted to be such that advertising messages that suggest the possibility of achievement of personal goals foster positive ad attitudes and strong self/brand connections. Thus, the second and third pathway toward consumer/brand connections among materialists hypothesized here are: Ad Exposure -> Ad-evoked thoughts about wisdom -> Attitude towards the Ad -> Consumer/Brand Connections and Ad Exposure -> Ad-evoked thoughts about wisdom -> Ad-evoked thoughts about good life -> Attitude towards the Ad -> Consumer/Brand Connections.

The influence of exposure to the ad on attitude toward advertising in general is expected to be positive for consumers with high levels of materialism regardless of the type of ad theme. Yoon [1995] found that materialism related positively to general attitude toward advertising and, according to Osmonbekov et al. [2009], this relationship is strong and positive because consumers with strong materialistic values are predisposed to focus attention on advertisements and attention plays significant and positive role in information processing which sets the stage for forming self/brand connection as consumers realize they can use the advertised brand instrumentally to achieve goals motivated by the self. Therefore, the fourth pathway toward consumer/brand connections is proposed here: Ad Exposure -> The attitude towards the ad -> Consumer/Brand Connections.

Hence, based on these literatures, it is hypothesized that:

**H3:** The effects of interaction between consumer materialism and advertising theme onto brand connections will be mediated by ad-evoked thoughts about wisdom and good life such that an ad with either materialistic or voluntary simplicity theme will evoke stronger thoughts about good

life and wisdom for individuals with higher levels of materialism (but not individuals with low levels of materialism). Specifically, it is hypothesized that:

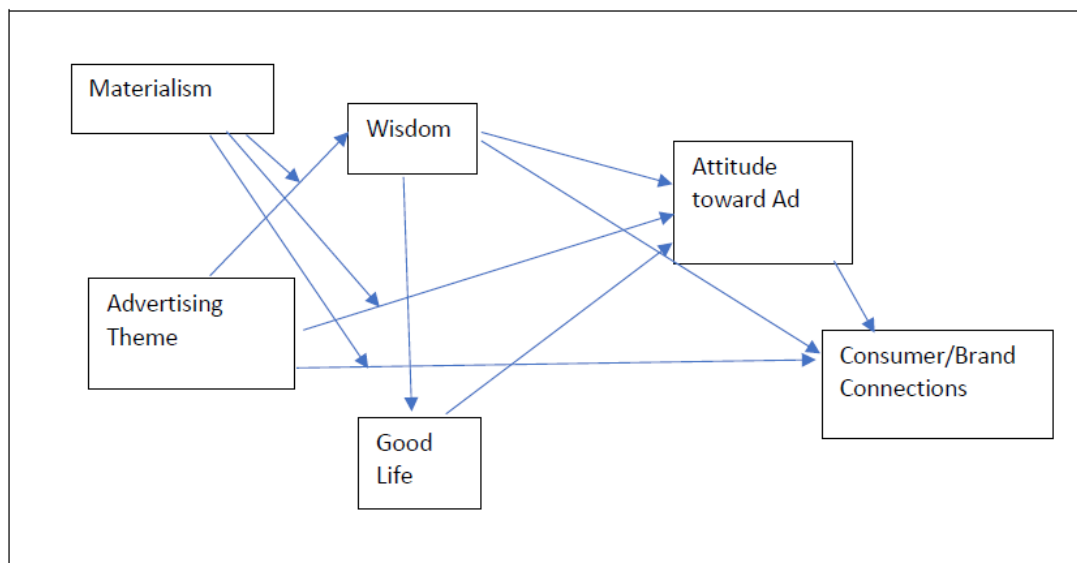
**H3.1:** Ad-related thoughts about wisdom (M1) will mediate the effects of the interaction between materialism and advertising theme on brand connections.

**H3.2:** Ad-related thoughts about wisdom (M1) and attitude toward the ad (M3), in a sequence (M1->M2), will mediate the effects of the interaction between materialism and advertising theme on brand connections.

**H3.3:** Ad-related thoughts about wisdom (M1), ad-related thoughts about good life (M2), and an attitude towards the ad (M3), in a sequence (M1->M2->M3), will mediate the effect of the interaction between materialism and advertising theme on brand connections.

**H3.4:** The attitude towards the ad (M3) will mediate the effects of the interaction between materialism and advertising theme on brand connections.

**Figure 1** Conceptual model of the impact of exposure to advertising on Consumer self/brand connections and the role of consumer levels of materialism as a moderator.



### **Voluntary Simplicity and Cognitive Responses**

The rebirth of voluntary simplicity in the early and mid-90s appears to have more to do with existential crises than with economic crises. People embrace voluntary simplicity ideology as part of a life project or philosophy because they are hoping to address existential dilemmas related to meaning of life and engage in anti-consumption or mindful consumption “as a means of building a sense of self with which they are satisfied” [Sandlin & Walther, 2009]. For simplifiers, the process of crafting lifestyle project identities in a culture of consumption serves important self-expressive function and involves distancing themselves from the society's notion of consumption being a crucial arena for responsible citizenship, which they find questionable.

The analysis by Vignoles, V. L., et al. [2006] indicates that as people construct and maintain their identities they seek to fulfill the following six identity motives: self-esteem, continuity, distinctiveness, belonging, efficacy, and meaning. This paper suggests that simplifiers' continuity, distinctiveness, and meaning motives will affect the ad-evoked thoughts in response to advertising with VS theme. It is hypothesized that search for continuity will evoke nostalgic thoughts, which, in turn, will affect an attitude towards the ad. The search for distinctiveness and meaning will evoke equality thoughts, which will affect an attitude towards the ad and self/brand connections. Sandlin, J. A., & Walther, C. S. [2009] noted that moral identity formation of simplifiers involves “identifying with a history of political activism that is typically broader in scope than current VS movement.” Process of "becoming a simplifier" involves creating a new identity, which refuses to accept society's normative ideals through re-introducing ideologies which allow more morally responsible consumer citizenship. Learning moral identity involves identifying ethical principles and defining the beliefs and values one chooses to hold. As Sandlin & Walther [2009] note, simplifiers are well informed about various ethical doctrines which were

the predecessors of a modern VS ideology and “take an extremely individualistic stance with regard to which ethical codes they will follow.”

### ***Ad-Evoked Thoughts about Nostalgia***

The generally high level of importance assigned to the renouncing dominant sociocultural values, including materialism and careerism, reflects simplifiers belief that destructive consequences of materialism are less likely to be found in some other contemporary and historical preindustrial societies. The U.S. consumers tend to be more materialistic and wasteful, driven by pursuit of the American dream, keeping up with the Joneses, a belief that “more is better,” and a desire for convenience, comfort, cleanliness and cosmetic perfection. In contrast, other countries and cultures are more frugal by nature. Ottman [2011] cites the Swedes’ Law of Jante (encouraging egalitarianism and community solidarity) as an example of cultural differences in attitudes toward inequality. Strizhakova et. al. [2008] found that the brand meaning category of traditions is based not only upon single-family histories, but also on national heritages. It is expected, therefore, that exposure to the ads with VS themes will evoke thoughts about traditions because of the long history that voluntary simplicity movement has in the US and because of simplifiers greater familiarity with the history of the movement. It is posited that ads with VS themes suggest meaning of continuity and communicate connectedness between the past, present and the future. Given this line of discussion, the first pathway toward consumer/brand connections hypothesized here is: Ad Exposure -> Ad-evoked nostalgic thoughts -> attitude toward the ad -> Consumer/Brand Connections.

### ***Ad-Evoked Thoughts about Equality***

The values which VS movement embraces include, in addition to ecological awareness and material simplicity, self-determination and personal growth [Elgin and Mitchell, 2003]. Elgin

criticizes modern individualism understood in the categories of self-interest and breaking social bonds, and advances a concept of society based on cooperation, mutual kindness and focus on increasing non-material wealth: interpersonal relations, concern for community, creative expression [Elgin, 2009]. Elgin's belief in the existence of the Living Universe directs toward refraining from advancing own 'personal ambitions' at the expense of others and concern not only for one's own welfare but for others' welfare as well [Elgin 2009]. Unlike mainstream consumers who view consumption objects as a means of reinforcing hierarchical stratification [Veblen 1899/1965; Schor, 1998], simplifiers pursue communal and social goals, such as promoting equality in society. Interestingly, Lee, et al. [2018] found that consumers who think of fairness as a universal value negatively evaluate consumers who use unearned resources to acquire luxury brands which, in turn, adversely affects consumer evaluations of the luxury brands. It is posited in this study that simplifiers believe that luxury brands signal economic inequality and a raw self-interest without a foundation of morality. Therefore, voluntary simplifiers will disengage themselves from the luxury brands while tending to connect to the brands which stand for equality and are promoted with the messages featuring an equality theme. Thus, the second and third pathway toward consumer/brand connections hypothesized here are: Ad Exposure -> Ad-evoked thoughts about equality-> Consumer/Brand Connections and Ad Exposure -> Ad-evoked thoughts about equality -> Attitude towards the Ad -> Consumer/Brand Connections.

Hence, based on these literatures, it is hypothesized that:

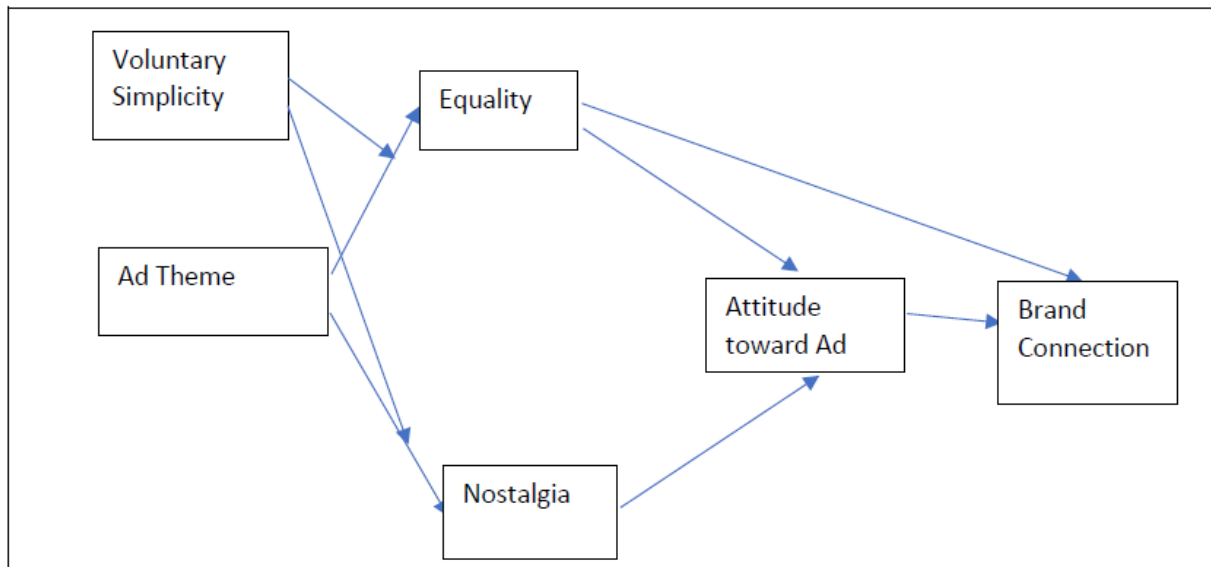
**H4:** The effects of an interaction of ad theme and voluntary simplicity onto consumer self/brand connections will be mediated by ad-evoked thoughts about equality, nostalgic thoughts, and attitude toward the ad. Specifically, it is hypothesized that:

**H4.1:** Ad-related nostalgic thoughts (M2) and attitude toward the ad (M3), in a sequence (M2->M3), will mediate the effects of the interaction of ad theme and voluntary simplicity on consumer/brand connections.

**H4.2:** Ad-related nostalgic thoughts (M2) will mediate the effects of the interaction of ad theme and voluntary simplicity on consumer/brand connections.

**H4.3:** Ad-related thoughts about equality (M1) and attitude toward the ad (M3), in a sequence (M1->M3), will mediate the effects of the interaction of ad theme and voluntary simplicity on consumer/brand connections.

**Figure 2.** Research Mediation Model of Voluntary Simplicity Ad Theme Predicting Brand Connections. Ad-evoked thoughts about equality, nostalgic thoughts, and attitude towards the ad are the mediators, \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



To sum up, this paper posits that consumers with high levels of materialism form self/brand connections after exposure to the ad, regardless of its theme, to satisfy identity motives, e.g. verifying or enhancing their self-concepts which enhances feelings of immense meaning and intentionality or envisionment of a purposeful and diligent lifestyle [Vignoles et al., 2006].

Furthermore, materialists' ad-evoked thoughts about wisdom and good life will mediate the effects of the ad on consumer self-brand connections. This paper argues that, unlike materialists, simplifiers will form self-brand connections with the brands reflecting voluntary simplicity values. Voluntary simplifiers will be inclined to distance themselves from the brands promoted using materialism-themed ads and, instead, connect to the brands promoted with the messages evoking VS ideology congruent thoughts, e.g. thoughts about equality and traditions (nostalgic thoughts). Hence, it is postulated that self/brand connections of both consumers with higher levels of materialism and simplifiers are shaped by signaling (to themselves and others) purpose of the symbolic acquisition but their differences in personal values govern different types of symbols they value. The politicizing of consumption transforms simplifiers into individuals who consciously consider the signaling (to themselves and others) consequences of the brand choice— and who routinely ask how the brand allows to express personal ideological concerns. In contrast materialists, who are also driven by identity motives, form connections with the brands promoted with the ads having either materialistic or VS theme when the brands allow consumers' augmented selves to have a fulfilling sense of purpose in life.

## TESTING HYPOTHESIS 1

### Overview

Print ads with materialistic and voluntary simplicity themes were selected and utilized to investigate Hypothesis 1. Specifically, stronger brand connections were expected to be formed when voluntary simplifiers are exposed to an ad with voluntary simplicity theme and when materialists are exposed to an ad with either voluntary simplicity and materialistic theme. These ads were examined requesting participants to list thoughts evoked after exposure as well as using the items to demonstrate the viability of the manipulations utilized in the study.



## Procedure

Participating 161 undergraduate students from two comprehensive higher education institutions at the Northeast of the United States were told that the researchers were interested in consumers' opinions about ads and asked to answer a set of questions measuring perceptions of promotional communications after been exposed to one of two ads with the theme reflecting either a materialistic or VS ideology.

Specifically, 81 participants saw the ad with materialistic theme, while 80 participants saw the ad with VS theme. In order to check for the viability of the theme manipulation participants were asked to list up to four ad-evoked, message-related thoughts or feelings. In addition, five self-reported measures of perception of the ad's message, adopted from Machleit et. al. [2001], were used to assess whether each ad's message manipulated elements intended to resonate with either VS or materialistic set of values.

Specifically, three items (achievement, affiliation, high status) were used for the materialistic theme check, since it has been demonstrated by Fitzmaurice and Comegys [2006] (see also Liao and Wang [2009]) that consumer with higher levels of materialism actively use acquired brands in their identity projects to signal status and prestige, thus strengthening perception of affiliation to other consumers with desired identities and perception of achievement [Arndt et al., 2004]. The other two items (individuality, equality) were used for the voluntary simplicity appeal check because voluntary simplifiers are "engaged in a struggle to define themselves as worthwhile and good people" concerned about achieving communal goals promoting equality in society [Grigsby, 2004, p. 53] and because of their personalized sense of morality [Sandlin and Walther, 2009]. Next, participants completed a measure of materialism [Richins, 2004] and the Voluntary Simplicity Questionnaire [Shama and Wisenbilt, 1984]. In addition, the items measuring the ad-

evoked thoughts, attitude toward the ad [Holbrook et. al., 1987], and consumer self/brand connections [Escalas et. al, 2003], were included in the data collection instrument.

### **Measures and Manipulation**

**Materialism.** A nine-item scale developed by Richins [2004] was used to measure materialism. An example item is, “My life would be better if I owned certain things I do not have.” The nine items were measured on a 7-point scale: 1 - strongly disagree, 7 – strongly agree, where lower numbers represent a lower materialism and higher numbers represent a higher materialism. Results of the reliability analysis demonstrated that this unidimensional measure of Consumer Materialism values was reliable (Cronbach’s Alpha= .855) and exceeded the minimum suggested level of Cronbach’s Alpha=.70 (Nunnally, 1978).

**Voluntary Simplicity (VS).** Voluntary simplicity is tied to the pro-environmental movement, mindful consumption ideology, focus on self-fulfillment and commitment to advancing the common good [Shama and Wisenblit, 1984]. The construct was measured by using nine items based on the inventory of the voluntary simplicity values proposed by Shama and Wisenbilt [1984]. An example item is, “To me consumerism has something to do with expending life energy for STUFF, much of which is unnecessary or fundamentally unrewarding.” Subjects were asked to indicate their agreement with the VS items by providing their response on a 6-point Likert scale (1 -strongly disagree, 2 -moderately disagree, 3 - slightly disagree, 4 - slightly agree, 5- moderately agree, 6 - strongly agree). Results of the reliability analysis demonstrated that this unidimensional measure of the Voluntary Simplicity values was reliable (Cronbach’s Alpha= .731) and exceeded the minimum suggested level of Cronbach’s Alpha=.70 (Nunnally, 1978).

*Advertising Themes.* Two color print ads for the clothing brands were selected for purposes of testing the hypothesized relationships. Clothing apparel was chosen as the advertised product category due to its widespread familiarity and use among the sample demographic (college-aged consumers) and because of its relevance as a product category featured in ads containing a materialistic or a voluntary simplicity appeal. Two real brands, Element and Louise Vuitton, were featured in the selected print ads to help increase the realism of the scenario and the likelihood that participants' exposure to the advertised brands would influence their realistic feelings of being connected to the brand. In a pre-test, these two ads yielded the most neutral and similar responses ( $mean_1 = .5494$  and  $mean_2 = .3083$ ,  $p > 0.05$ ), on the Elaboration of Advertising Stimuli index consisting of six 7-point items: don't provoke imagery/ provokes imagery, dull/ vivid, boring/ interesting, I had few thoughts in response to the ad/ I had many thoughts in response to the ad, the ad has one meaning/ the ad has multiple meanings, the ad has simple meanings(s)/ , the ad has rich, complex meaning(s), and was therefore deemed appropriate for use in the study. As can be gleaned from examining the exhibits, both ads were very similar in their overall approach toward layout, but varied in their art design – visual elements acted as stimuli intended to evoke either materialism- or voluntary simplicity- related thoughts and feelings. The copy reinforced the VS theme of the Element ad. For the ad with materialistic theme, reference was made to a young woman glamorously dressed, wearing a driver's hat and getting out of the old-fashioned car and a scenario which connotes wealth, elegance and power. The ad intended to produce responses such as feeling intrigued, thoughts about luxury, power, high class, and independence, which are likely to resonate with and evoke feeling of being connected to the brand among respondents holding materialistic values. For the other treatment condition, the ad with voluntary simplicity appeal made reference, visually and

textually, to the idea of being part of the natural world as well as the notion of spirituality and magic. For example, this ad featured a landscape background with trees and flowers and other earthly imagery suggesting peacefulness, calmness, and simple pleasures. The young female model featured in the ad is relaxed, mellow, comfortable, carefree. The ad alluded to respondents' possible past summers' experiences and states of mind participants were likely to have personally experienced in their lives (uniting with nature, dreaming about the future, etc.) in the past.

***Advertising Theme Manipulation Check.*** First, immediately following viewing of the ad, using an open-ended response listing procedure, subjects were told to write down up to four thoughts and feelings they had towards what was depicted or stated in the advertisement. As anticipated, the ad with a materialistic theme produced a significantly more extensive associative network of materialism-related thoughts per person than the ad with VS theme. Similarly, the ad with VS theme produced a significantly more extensive associative network of VS-related thoughts per person than the ad with materialistic theme. In addition, self-report items adapted from the Machleit et al. [2001] were used to examine the viability of the ad-generated manipulations to demonstrate that the ads tap the underlying sets of values. Three items (achievement, affiliation, high status) made up the materialistic manipulation check and other two items (individuality, equality) were used for the VS manipulation check. All items used a 5-point scale: 1 – not at all, 7 – very much so.

***Process Measures.*** Measures of the ad-evoked thoughts after exposure to the ads were used to examine the mediational hypotheses presented above. Two one-item measures of ad-evoked thoughts per each experimental condition were created for this purpose. Each measure consisted of one 5-point (not at all/very much so) scaled items, but differed in terms of their thought

content reference, consistent with conceptualizations of cognitive responses in the marketing literature [Machleit and Mantel, 2001]. For the materialism-related thoughts measure, participants were asked to indicate the extent to which they agreed with the following two statements, ‘What was in the ad was consistent with the idea of good life,’ and ‘What was in the ad was consistent with the idea of wisdom.’ The approach in this paper parallels the approach taken by Ardel [2003, 2008] and others who treat wisdom as a latent measurable construct. However, the framework in this paper recognizes that people will experience different dimensions of wisdom during exposure to the ads with different themes. When exposed to a materialism-themed or VS-themed ad, consumers with higher levels of materialism may seek to personalize the wisdom experience by first examining its contents from a self-directed perspective (i.e. picturing themselves in the context of the ad), even at times when they have never personally experienced the scenario/event depicted in the advertisement. Such a contention is supported by findings reported by Debevec and Iyer [1988], indicating that it is common for consumers to use the self as a referent when assessing advertising message. Measures of the voluntary simplicity-related thoughts asked participants to indicate the extent to which they agreed with the following two statements, ‘What was in the ad was consistent with the idea of equality,’ and ‘What was in the ad was consistent with the idea of nostalgia.’

Doubly concrete constructs are defined as “constructs that have a simple, clear object and a single and single-meaning attribute” [Bergkvist, 2015, p. 246]. Ad-evoked cognitive responses to the ad meet these two criteria and, according to Rossiter (2002, 2011), a single item deems appropriate for consideration while measuring doubly concrete constructs. Given this argument, one-item measures were used as process measures assessing subjects’ cognitive responses to the ad.

***Elaboration of advertising stimuli.*** Elaboration was measured using six 7-point semantic differential items: -3 = doesn't provoke imagery, dull, boring, I had few thoughts in response to the ad, the ad has one meaning, the ad has simple meanings(s); +3 = provokes imagery, vivid, interesting, I had many thoughts in response to the ad, the ad has multiple meanings, the ad has rich, complex meaning(s). Results of the reliability analysis demonstrated that this measure of involvement was reliable (Cronbach's Alpha= .875).

***Attitude toward the ad.*** Attitude towards the ad ( $A_{ad}$ ) was measured using a four-item scale adopted from Holbrook and Batra [1987] anchored from -3 to +3. This choice reflects a common practice in advertising research. The analysis of the multi-item measures of  $A_{ad}$  conducted by Bergkvist & Langner [2017] revealed that for  $A_{ad}$ , an overwhelming number of researchers have utilized either four-item or five-item scale. The scale asked participants to indicate their reaction to the ad using the following items: 'I dislike the ad/I like the ad,' 'I react unfavorably to the ad/I react favorably to the ad,' 'I feel negative toward the ad/I feel positive toward the ad,' 'The ad is bad/The ad is good.' Cronbach alpha results ( $\alpha = .895$ ) supported the development of an  $A_{ad}$  index, formed by averaging the responses to the four 7-point scale items.

***Consumer Self-Brand Connections.*** The consumer self-brand connections construct was measured using five items from Escalas and Bettman's [2003] Self-Brand Connection (SBC) scale. This measure of the SBC has been extensively validated [Rindfleisch et. al., 2009]. An SBC index was developed by averaging responses to seven Likert scale items (Cronbach's Alpha= 0.926).

## **Results**

***Materialism and Voluntary Simplicity Values.*** Prior research suggested that values of voluntary simplifiers are opposite to materialistic values because one is the antidote to the other [García-

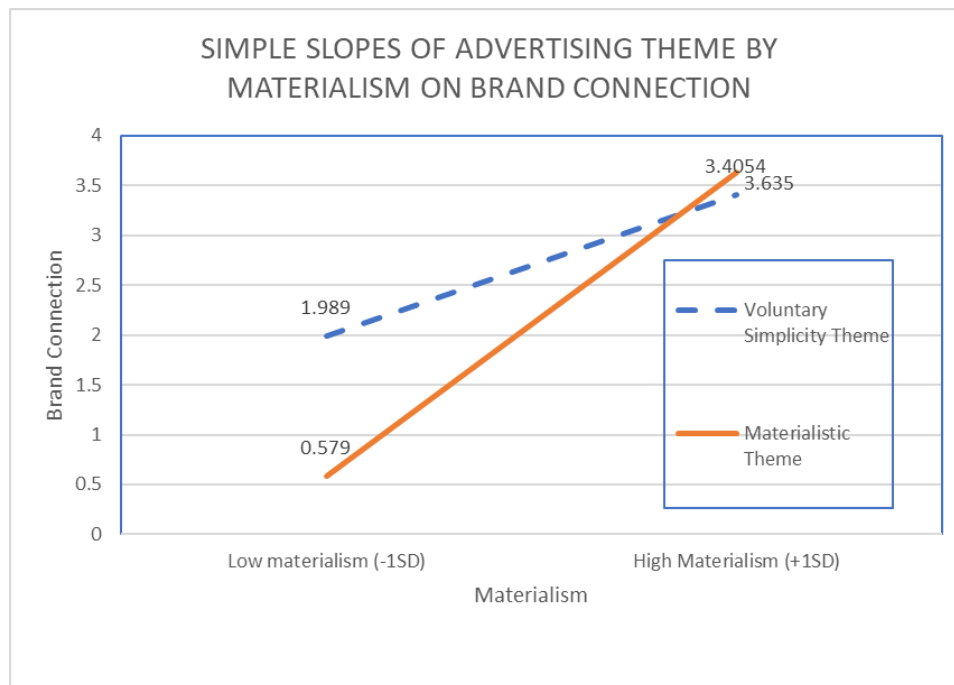
de-Frutos et al., 2019]. Consistent with prior research, materialism was shown to be significantly and negatively correlated with Voluntary Simplicity ( $r=-.302$ ,  $p<0.01$ ).

***Advertising Appeal Manipulation.*** The manipulation check items indicated that the materialistic ad ( $M = 3.12$ ,  $M=3.16$ ,  $M=4.55$ ) scored higher on achievement, affiliation and high status than the ad with the voluntary simplicity appeal ( $M = 2.57$ ;  $t(159)=2.819$ ,  $p<.001$ ;  $M = 2.82$ ;  $t(159)=2.032$ ,  $p<.05$ ;  $M = 2.337$ ;  $t(159)=13.69$ ,  $p<.001$ ). Furthermore, the manipulation check revealed that the ad with the voluntary simplicity appeal ( $M = 3.775$ ,  $M=2.11$ ) scored higher on individuality and equality than the ad with materialistic appeal ( $M = 3.197$ ;  $t(159)=-2.709$ ,  $p<.05$ ;  $M = 1.555$ ;  $t(159)=-3.378$ ,  $p<.05$ ).

***Effectiveness of Advertising Appeals*** The continuous measures of materialism and voluntary simplicity were mean-centered before creating the interaction of respondents' values (materialism and voluntary simplicity) by advertising appeal. The interactions of the materialism and the voluntary simplicity measure by advertising appeal were created. First, materialism, advertising appeal, and the advertising appeal by materialism interaction were regressed onto the brand connection. The full model was significant ( $F(3,157)=12.859$ ,  $p<0.0001$ ). The results revealed a significant interaction of materialism by advertising appeal ( $\beta=-0.650$ ;  $t(157)=-3.788$ ,  $p<0.001$ ) all betas reported are unstandardized). While the main effect of materialism on brand connection ( $\beta=.047$ ;  $t(157)=.427$ ,  $p>.05$ ) was found to be insignificant, the main effect of advertising appeal ( $\beta=-0.661$ ;  $t(157)=-2.830$ ,  $p<0.01$ ) was found to be significant. A simple slopes analysis, presented in Figure 3, was conducted to examine the slopes of the interaction between advertising appeal and materialism at one standard deviation above (high materialism) and below (low materialism) the mean [Aiken and West 1991]. Results revealed that the voluntary simplicity appeal generated stronger self-brand connections for individuals with low

levels of materialism, while materialistic appeal failed to evoke strong brand connections for individuals with low levels of materialism. Ads with both voluntary simplicity appeal and materialistic appeal induced strong self-brand connections among individuals with high levels of materialism. These results support the Hypotheses H1.1 and H1.2.

**Figure 3 Simple Slopes of Advertising Theme by Materialism on Brand Connection**



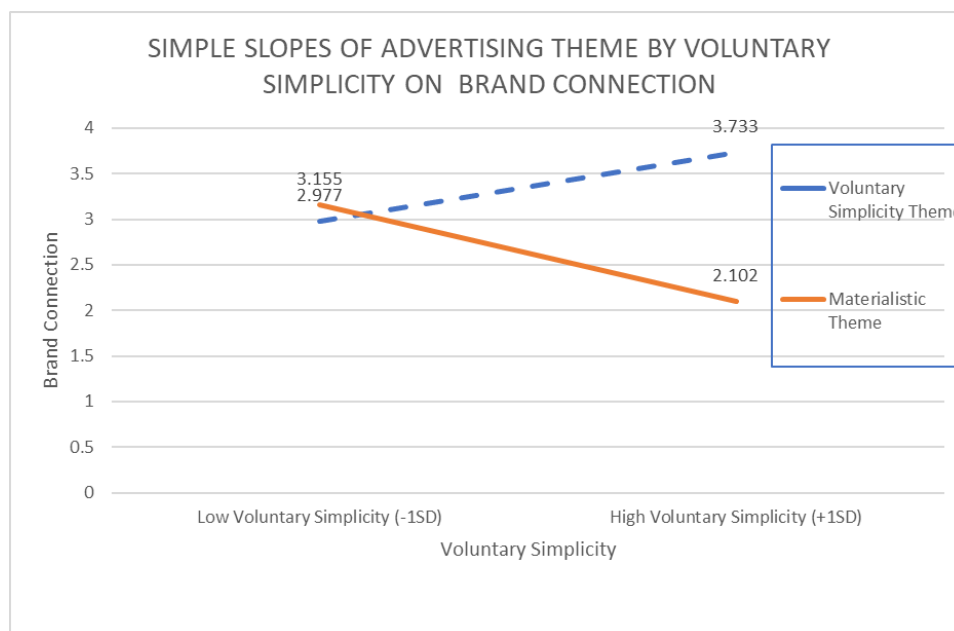
Second, respondents' voluntary simplicity scores, advertising theme, and the advertising theme by voluntary simplicity interaction were regressed onto the brand connections. The full model was significant ( $F(3,156)=7.474$ ,  $p<0.0001$ ). The results revealed a significant interaction of VS by advertising theme ( $\beta=1.156$ ;  $t(157)=3.667$ ,  $p<0.05$ ). Both the main effect of VS ( $\beta=-.673$ ;  $t(157)=-2.842$ ,  $p<0.05$ ) and advertising theme ( $\beta=.726$ ;  $t(157)=2.976$ ,  $p<0.05$ ) were found to significantly predict brand connection.

Again, a simple slopes analysis, presented in Figure 4, was conducted to examine the slopes of the interaction between advertising theme and voluntary simplicity at one standard deviation



above (high VS) and below (low VS) the mean [Aiken and West 1991]. Results revealed that the ad with a voluntary simplicity theme caused stronger brand connections for high (but not low) voluntary simplifiers. Ads with voluntary simplicity theme and materialistic theme caused the same level of brand connections for low voluntary simplifiers. These results support hypotheses H2.1 and H2.2.

**Figure 4 Simple Slopes of Advertising Theme by Voluntary Simplicity on Brand Connections**



## Discussion

While the evidence presented above supports hypothesized interactions, it could be argued that the advertising theme might have unintentionally manipulated thoughts about tradition and resourcefulness rather than two systems of values: materialism and voluntary simplicity ideology. Therefore, to rule out these potential confounds, perceptions of resourcefulness and tradition were measured. To do so, perceptions were measured by asking participants to indicate to what extent “What was in the ad was consistent with the idea of ..... “ on a 5-point scale: 1-

not at all, 5 – very much so. Results of this posttest revealed no significant differences in the evoked thoughts about tradition between ads with materialistic ( $M = 2.6$ ) and voluntary simplicity ( $M = 2.23$ ;  $t(159) = 1.831$ ,  $p > .05$ ) themes. Similarly, there were no differences in the evoked thoughts about resourcefulness between ads with materialistic ( $M = 2.12$ ) and voluntary simplicity ( $M = 2.47$ ;  $t(159) = -1.790$ ,  $p > .05$ ) appeal.

Furthermore, it could be argued that the advertising themes might have unintentionally evoked different levels of elaboration of ads in two experimental conditions because of the differences in creative execution and, therefore, manipulated responses to the ads due to creative execution rather than two types of themes: materialism and voluntary simplicity. Therefore, to rule out this potential confound, elaboration of advertising stimuli was measured. Participants were asked to indicate the extent to which they agreed with the items regarding the ad they saw. Six items are described in the measures section of the paper above. An elaboration index was developed by averaging responses to six 7-point scale items. This posttest check measure revealed no significant differences in the elaboration of advertising stimuli between the ads with materialistic ( $M = .5494$ ) and voluntary simplicity ( $M = .3083$ ;  $t(159) = 1.14$ ,  $p > .05$ ) appeals.

This additional analysis helped to rule out potential confounds associated with the advertising themes.

The results presented above illustrate that matching advertising theme with consumers values can lead to increase in consumer self-brand connections among voluntary simplifiers. Also, as predicted, exposure to the ad led to the increase in consumer self-brand connections among consumers with higher levels of materialism regardless of whether the theme was materialistic or voluntary simplicity. Moreover, the results show that using any theme that helps materialists to maintain or enhance their self helps the advertised brand. Ads with either theme

addressed materialists identity and meaning-seeking motives and, as a result, seem to led to stronger consumer self-brand connections among materialists.

In sum, first, while consumers with higher levels of materialism were shown to feel strongly connected to the brand when exposed to the ad with either voluntary simplicity and materialistic theme, consumers low in materialism were shown to form brand connections after being exposed to an ad with a voluntary simplicity (but no materialistic) appeal. Second, while consumers low in voluntary simplicity were shown to form brand connections of equal strength after being exposed to the ad with either voluntary simplicity or materialistic theme, consumers high in voluntary simplicity were shown to form strong brand connections after being exposed to an ad with a voluntary simplicity (but no materialistic) theme.

#### **TESTING MEDIATIONAL HYPOTHESES 3 AND 4.**

##### **Overview**

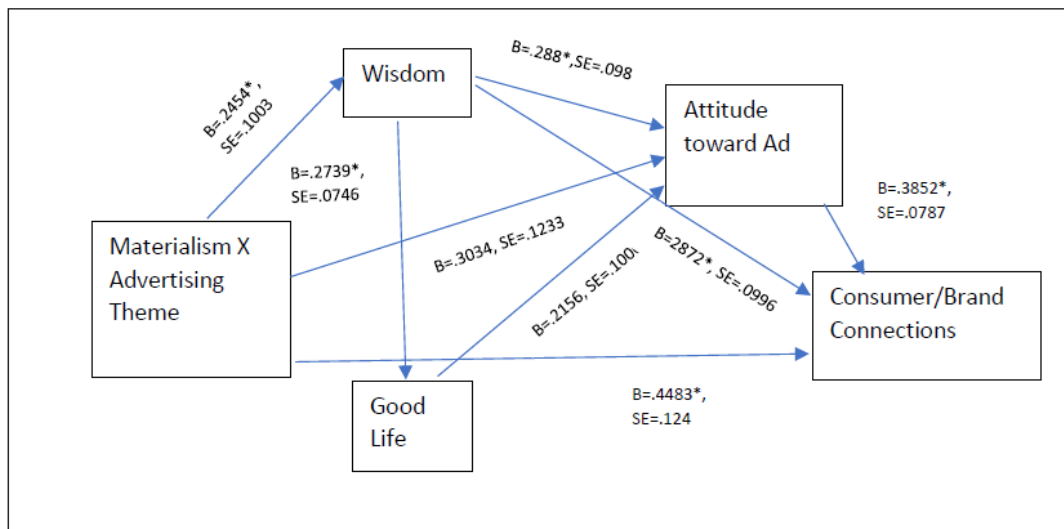
The second set of hypotheses (H3–H4) predicted that exposure of individuals with higher levels of materialism to an ad with either materialistic or VS theme or simplifiers exposure to an ad with a theme congruent to the voluntary simplifier's values would evoke greater levels of cognitive responses congruent with individual's values, and that these cognitive responses would, in turn, affect attitudes toward the ad and self-brand connections. Accordingly, the following analysis was conducted to examine the mediating role of the ad-evoked cognitive responses (thoughts about good life, wisdom, nostalgia, and equality) and attitude toward the ad on the relationship between the ad theme and self/brand connections. It is hypothesized that thoughts congruent with voluntary simplifiers' values, evoked during exposure to advertising, and attitudes toward the ad form the pathways towards consumer self/brand connections. It is also hypothesized that both ad-evoked thoughts, addressing consumers with higher levels of

materialism identity and search for meaning motives, and positive attitudes toward the ad will form semantic pathways towards self/brand connections among materialists. Statistical tests (the serial multiple paths multiple mediator models) yielded results in support of two mediational hypotheses.

### TESTING HYPOTHESIS 3

This paper postulates that the independent variable, a message appeal, exerts a direct and indirect effect on self-brand connections among consumers with high levels of materialism and proposes parallel processes via which ad theme influences self/brand connections. This effect is exerted through a causal chain involving three mediators: ad-evoked thoughts about wisdom, ad-evoked thoughts about good life, and attitude towards the ad. In order to test the Hypothesis 3 the author considers the serial four paths multiple mediator model, in which an independent variable is modeled to exert an effect on consumer brand connections directly as well as indirectly via three mediators forming four causal chains (pathways). The following analysis follows Figure 5 and is conducted to test four causal chains (pathways) postulated by Hypothesis 3.

**Figure 5.** Estimated Research Mediation Model of Materialism and Ad Theme Interaction Predicting Brand Connections. Ad-evoked thoughts about wisdom, good life and attitude toward the ad are the mediators. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



The moderated mediation model (Figure 5) is a serial multiple mediation model [Hayes, 2015]. H3.1 postulates that ad-evoked thoughts about wisdom mediate the effects of the interaction between materialism and advertising appeal on consumer/brand connections. According to H3.2 ad-evoked thoughts about wisdom influence brand connection directly and indirectly via attitude towards the ad. Hypothesis H3.3 postulates that ad-evoked thoughts about wisdom affect ad-evoked thoughts about good life, which, in turn, influence attitude towards the ad and further allows an attitude towards the ad to affect consumer/brand connections. Finally, H3.4 suggests that attitude toward the ad mediates the effect of a message appeal on consumer brand connection.

The specific indirect effects through ad-evoked thoughts about wisdom and good life, and attitude towards the ad in a sequence are modeled as serial multiple mediator model which paths are freely estimated versus fixed to zero [for a discussion, see Hayes, 2013]. The indirect effects in all hypothesized causal chains are a product of two or more regression coefficients. The estimated regression coefficients are displayed on Figure 4. Since it is already well established that the sampling distribution of the product of regression coefficients is not normal [Hayes, 2015], meaning the normal distribution is not the adequate sampling distribution for inference about indirect causal effects, Hayes [2015] recommended using a bootstrapping procedure to compute a confidence interval around the indirect effect and using the PROCESS [Hayes 2013]. Bootstrapping is shown to be superior to the Sobel test and is already implemented in software that marketing researchers are using for mediation analysis [Zhao, 2010]. Accordingly, the paper tested Hypothesis 3, following the recommendations of Hayes [2015, 2013]. The mediation model with all predictors explained 35.6% of variance in consumer/brand connections ( $R^2 = .3560$ ,  $p < .00001$ ). H3.1 posits that ad-related thoughts about wisdom will mediate the

effects of the interaction term (ad theme X materialism) on consumer /brand connections (interaction term (ad theme X materialism) -> ad-evoked thoughts about wisdom -> consumer self/brand connections). Therefore, for the first pathway, the interaction term (ad appeal X materialism) is the predictor variable, thoughts about wisdom is the mediator, consumer brand connection is the dependent variable. Analysis from a bias-corrected bootstrap with 10,000 bootstrap samples using the PROCESS macro [Hayes 2013] revealed a significant mediation effect of ad-evoked thoughts about wisdom ( $B=.0705$ ,  $SE=.0349$ , 95% CI[.0147;.1512]). That is, because the confidence interval around the indirect effect doesn't include zero, one can infer that ad-related thoughts about wisdom mediate the effect of ad appeal on brand connections, and this mediation is moderated by materialism. Thus, ad-evoked thoughts about wisdom mediate relationship between advertising theme and consumer/brand connections and this relation is moderated by materialism. Similar analysis was performed for the second causal chain posted by H3.2: the ad-evoked thoughts about wisdom and attitude toward the ad, in a sequence, mediate the effects of the materialistic theme on self/brand connections. It is the product of paths and not the paths themselves that define the indirect effect, which is calculated as the product of paths linking independent and dependent variable via two mediators. To examine whether the next hypothesized pathway, ad theme X materialism -> ad-evoked thoughts about wisdom-> attitude towards the ad -> consumer self/brand connections, fits the data, the model estimation from a bias-corrected bootstrap with 10,000 resamples using the PROCESS [Hayes, 2013] was performed. Results of analysis revealed a significant indirect effect indicating that ad-evoked thoughts about wisdom and attitude towards the ad, in sequence, mediate for the relationships between an interaction of the ad theme and materialism and consumer self/brand connections ( $B=.0272$ ,  $SE=.0142$ , bootstrap 95% CI[.0044;.0597], see Figure 5).

The hypothesis H3.3 posited the indirect effect of the interaction between ad theme and materialism on consumer self/brand connections through all three mediators forming a causal chain (materialism X ad theme->ad-related thoughts about wisdom-> ad-related thoughts about good life-> attitude towards the ad-> consumer self/brand connections). Results of the analysis using PROCESS macro revealed a significant indirect effect ( $B=.0056$ ,  $SE=.0039$ , 95% CI[.0004;.0154]), so it can be fairly definitively stated that the hypothesized indirect effect via all three mediators is empirically supported. Finally, the link between the interaction term (ad theme X materialism) and consumer/brand connections was also mediated by attitude toward the ad ( $B=.1169$ ,  $SE=.0595$ , 95% CI[.0091;.2444]). All estimated regression coefficients are displayed on Figure 5.

Thus, results of testing of all four mediational hypotheses confirm that the effect of the ad theme on the consumer self/brand connections among individuals with higher levels of materialism was partially mediated in a manner specified by the causal chains posited by H3.1 – H3.4. Of importance, a direct effect of materialistic theme on self/brand connections remained significant ( $B=.4483$ ,  $SE=.1240$ , 95% CI[.2034;.6932]) indicating the case of partial mediation.

Testing hypothesis 3 extends the findings obtained when testing Hypothesis 1 and by uncovering the mechanism underlying the effect of ad theme on consumer self-brand connections among consumers with higher levels of materialism.

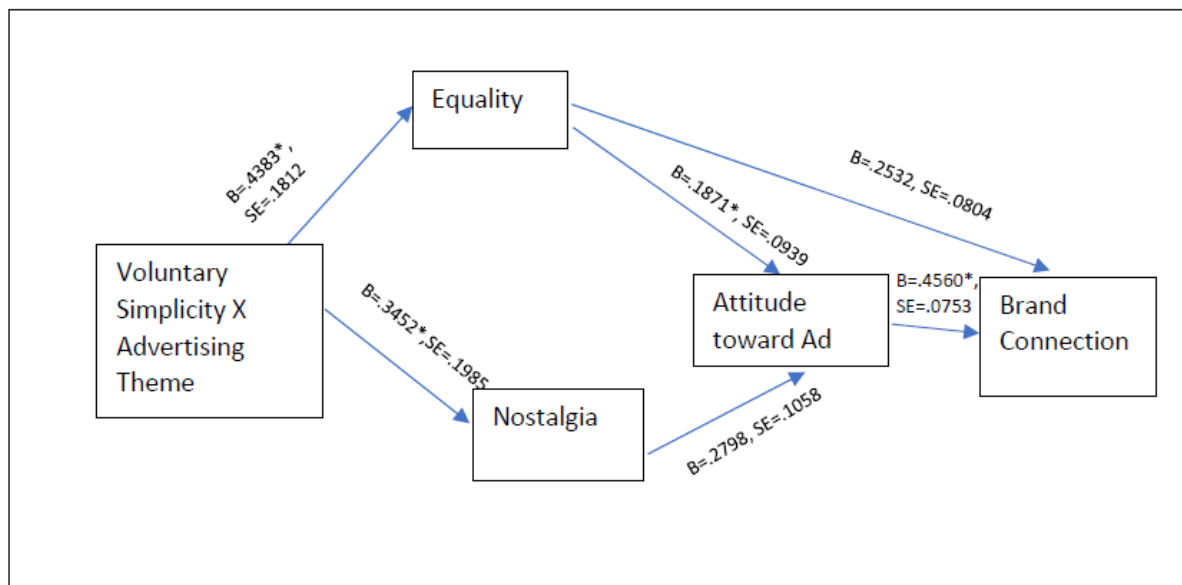
#### **TESTING HYPOTHESIS 4**

It is hypothesized that the independent variable, an advertising theme, exerts an indirect (but no direct) effect on consumer self-brand connections among voluntary simplifiers. This effect is exerted through the parallel causal chains involving the following mediating variables: ad-evoked about equality, ad-evoked nostalgic thoughts, and an attitude towards the ad.

Accordingly, the multiple mediators model is tested, in which an independent variable, an interaction between an advertising theme and voluntary simplicity ideology, is modeled to exert an effect on consumer brand connections indirectly through the pathways consisting of three aforementioned mediators. The model estimated in this analysis is depicted on Figure 6.

The model represents a process in which ad-evoked thoughts about equality to affect attitude towards the ad and further allows an attitude towards the ad to affect consumer self/brand connections. The model also represents a process, parallel to the previous one, in which nostalgic thoughts to influence self/brand connection directly and to affect attitude towards the ad and further allows an attitude towards the ad to affect consumer self-brand connections.

**Figure 6.** Estimated Research Mediation Model of Voluntary Simplicity Ad Theme Predicting Brand Connections. Ad-evoked thoughts about equality, nostalgic thoughts, and attitude towards the ad are the mediators, \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$



The downstream effect of the interaction of voluntary simplicity theme and consumer VS ideology on consumer self/brand connections via ad-evoked thoughts about equality, nostalgic thoughts, and attitude towards the ad using a serial multiple mediator model in the PROCESS macro with 10,000 bootstrap samples [Hayes, 2013] was examined next.



In a way similar to the mediational analysis performed earlier, the specific indirect effect through ad-evoked thoughts about equality, nostalgic thoughts, and the attitude toward the ad is modeled as a multiple mediator model. The estimated regression coefficients are displayed on Figure 6. The effect of an interaction of a voluntary simplicity theme and consumer VS ideology on consumer self/brand connections through three hypothesized pathways, using the PROCESS [Hayes 2013], was tested.

H4.1 posits that ad-related nostalgic thoughts will mediate the effects of an interaction of the voluntary simplicity theme and consumer VS ideology on self/brand connections (an interaction of message theme X consumer VS ideology -> ad-evoked nostalgic thoughts -> brand connections). The analysis of this pathway from a bias-corrected bootstrap with 10,000 resamples using the PROCESS macro [Hayes, 2013] revealed a significant mediation effect ( $B=.111$ ,  $SE=.0523$ , 95% CI[.0226;.2276]). Therefore, it is concluded that the indirect effect of a voluntary simplicity appeal on brand connections among simplifiers through ad-evoked nostalgic thoughts is significant. Hence, ad-evoked nostalgic thoughts mediate the impact of the ad theme on consumer self/brand connections among simplifiers. A similar analysis was conducted for the second pathway hypothesized by H4.2 (message theme X VS -> Ad-evoked thoughts about equality -> self/brand connections). The model estimation from a bias-corrected bootstrap with 10,000 resamples using the PROCESS macros [Heyes, 2013] revealed a significant indirect effect ( $B=.1140$ ,  $SE=.0683$ , 95% CI[.0117;.2727]), indicating that ad-evoked thoughts about equality mediate the effect of an ad theme on brand connections among simplifiers. Finally, the third pathway was tested (ad theme -> ad-evoked thoughts about equality-> attitude towards the ad-> self-brand connections). The analysis using the PROCESS macro [Hayes, 2013] produced the bootstrap confidence interval with 10,000 resamples and revealed a significant effect

( $B=.044$ ,  $SE=.0296$ , 95%  $CI[.0028;.1148]$ ). It can be fairly definitively stated that this hypothesized indirect effect via two mediators is empirically supported. Thus, the above results of testing of all three mediational hypotheses in their totality support the research model. Importantly, the mediational analysis provides a reason why matching advertising theme with simplifiers values leads to stronger consumer self/brand connections. When the ad features a VS theme, it evokes VS ideology-congruent nostalgic thoughts and thoughts about equality, which increased consumer self-brand connection. The thoughts about equality also strengthen a positive attitude towards the ad which, in turn, strengthen consumer self/brand connections. A direct effect of a voluntary simplicity theme on self-brand connections among voluntary simplifiers was insignificant (95%  $CI[-.1529;.5870]$ , as expected. Testing hypothesis 4 extends the findings obtained when testing hypothesis 2 by uncovering the mechanism underlying the effect of an ad theme congruent with VS values on consumer self/brand connections among simplifiers.

## GENERAL DISCUSSION

### Summary of Findings and Theoretical Contributions

This study is the first to compare the effects of consumer materialism and voluntary simplicity ideology on self/brand connections, and to compare the underlying cognitive and attitudinal pathways towards consumer self/brand connections. Previously, materialism and voluntary simplicity have been studied separately by marketing scholars, making it difficult to identify similarities or differences between them as predictors of important and managerially relevant outcomes. Past research is extended by showing that materialism leads to formation of strong self/brand connections after exposure to advertising with either materialistic or voluntary simplicity theme. The results also show that voluntary simplicity ideology leads to strong

self/brand connections after exposure to advertising with ideologically congruent theme only. These findings extend previous research by showing that simplifiers are influenced by marketing messages that are ideologically congruent (but not ones that are incongruent). As a result, the predisposition of both consumers with higher levels of materialism and consumers-simplifiers to form self/brand connections, when exposed to the ad with VS theme, appears to be strikingly similar.

Results also reveal that, while both materialism and VS ideology exert positive effects on self/brand connections, they do so for fundamentally different reasons: materialistic consumers have strong transformation expectations toward advertised brand and connect in an effort to acquire or maintain wisdom and make themselves happier, when seeking identity maintenance and/or enhancement, while voluntary simplifiers form self/brand connections in an effort to re-create themselves as moral agents who are living a life of purpose. Therefore, although the process of forming self/brand connections among consumers with higher levels of materialism and simplifiers may often appear to be very similar, the underlying mechanisms are very different. This finding is important because it suggests that marketing messages targeted to these two groups of consumers should be conceptualized accordingly.

The results of the present study offer preliminary support for the notion that ads with VS theme are capable of prompting the evocation of cognitive responses congruent with underlying motivations of simplifiers and consumers with higher levels of materialism. Moreover, it is these motivationally determined cognitive responses that were shown in this study to have the greater influence on consumers' self/brand connections, either directly or indirectly, via attitude toward the ad.

Therefore, it would appear that ads that have Voluntary Simplicity theme (even those ads for which the targeted market may have embraced mainstream consumer ideology) may successfully connect with the individual at a personal level – calling into question the need for advertisers to always consider developing advertisements with only a very targeted theme (tailored to simplifiers or consumers with high levels of materialism) in mind. It was shown that, despite widespread believe that voluntary simplifiers value goods for function and not for the symbolic nature, and abandon brand conscious values, appealing to the ideological beliefs of simplifiers significantly enhances their self/brand connections. The enhanced self/brand connections can optimize simplifiers' spending patterns to create better situations for sustainable consumption while enabling simplifiers to maintain signal (to themselves and others) their moral identity. From a managerial perspective, recognizing and exploiting individuals' materialistic and voluntary simplicity values and responses to marketing actions can be proposed as a useful segmentation tool. The conducted study suggests that marketers may benefit from taking into consideration VS and materialistic value orientations of consumers when fostering self/brand connections, by employing messages with VS theme when targeting consumers with high levels of materialism and simplifiers, and employing messages with VS theme only when targeting simplifiers, thus creating a balanced mix of the messages allowing to reach several targeted markets.

Continuing to build a better understanding of how consumers with different value orientations form self/brand relationships is critical for marketing researcher. In our age of impulsive and complicated consumerism, voluntary simplifiers confront the question while encountering the marketing message: “Is this brand going to be helpful or is it going to be detrimental? Is it going to bolster our life together, as a community, or is it going to somehow tear it down? ” It looks

like at the core of VS philosophy regarding the relationships with the brands is the following trade-off: the simplifiers prioritize benefits generated by acting intentionally about brands over benefits lost from the brands they decide not to connect with. Simplifiers are taking personal responsibility for making decisions in a way that's consistent with their core values. They also connect efforts to be a "conscientious consumers" with issues relating to social justice and sustainability. Part of what makes this approach towards forming self/brand connections so effective is that the very act of being selective about your brands will bring simplifiers satisfaction, typically much more than what they lost from the brands you decide to avoid. Consumers with higher levels of materialism are seeking transformational benefits from the brands depicted in marketing messages and the sense of meaning comes from acting with intention. The meaningful glow comes from forming relationships with the brands defined by a narrative of transformation and a purposeful life, giving materialists the meanings that yield the bulk of their satisfaction with life. Identifying consumer values and matching them with appropriate brand narratives will not only help firms increase their bottom-line, but can also help consumers feel that their life is intentional and meaningful.

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# **BETWEEN AASTHA AND ZEE: MYSTERY OF THE MISSING MARKET FOR A WEATHER CHANNEL**

**SATISH Y. DEODHAR AND  
CHAYASMITA DEKA<sup>1</sup>**

## **Abstract**

Until a few decades ago, Doordarshan was the only channel which would broadcast TV programmes in black-&-white and that too for a few hours. It was a pure public good then, offered free of cost by the government. Today, however, from Aastha to Zee there are hundreds of dedicated private channels competing to offer news, sports, entertainment, and spirituality for a price. And still, there is not a single channel which is dedicated to 24-hour weather forecast. This is a clear case of market failure of the free enterprise system. The missing market for an exclusive weather channel is the result of perceived marginal private benefit to millions of individual farmers and other stakeholders being much less than the marginal social benefit accruing to the nation as a whole. Every year unanticipated weather patterns cause huge economic losses to food and agriculture and other industries and cause a great number of fatalities too. If IMD gives quick alerts to pilots and airports, and some private forecasters plan to give medium to long-term forecast to cricketing and other events, the same can be done for millions of farmers and other stakeholders of the economy. Therefore, government and the corporate sector may offer a 24-hour TV channel for weather forecast in the form of public private partnership (PPP). The weather forecasting infrastructure and data may come from

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government institutions such as IMD, C-DAC, and ISRO; professional content delivery and services of weathermen who deliver the content may come from TV media firms; and the break-even revenue may come through CSR activities of the corporate sector.

**Key Words:** Agriculture, Agro-Climatic Zones, Food Safety and Quality, CSR, Externality, IMD, India, ISRO, Marginal Social Benefit, Marginal Private Benefit, Media firms, Public Good, Television, TV, Weather Channel

**JEL Classification:** D62, H4, L82, L86, Q54

## 1. Market for TV Channels

### Pure Public Good

Quite a few of you would remember – More than a score years ago, television (TV) viewers in India had to be content with the monopoly of Doordarshan. Doordarshan was the one and only channel available for viewing on TV and it was owned by the state. Private firms would not have been able to offer this service to viewers then. There were two reasons for this. First, once viewers had access to TV sets and they were within the broadcast range, technology of that time made it practically impossible for private firms to charge a price for viewing the block the channel for non-paying free-riders. Second, unlike other goods that one buys from the market, if someone watched the channel on one's TV-set, it did not mean that the very same channel could not be watched at the same time by others from their respective TV-sets. Thus, Doordarshan was characterized by two features – non-excludability and non-rivalry in consumption. No private parties would have ventured into this business. It was a clear case of a market failure, where the service had to be offered for free by the government. As economists would call it, Doordarshan was a pure public good.

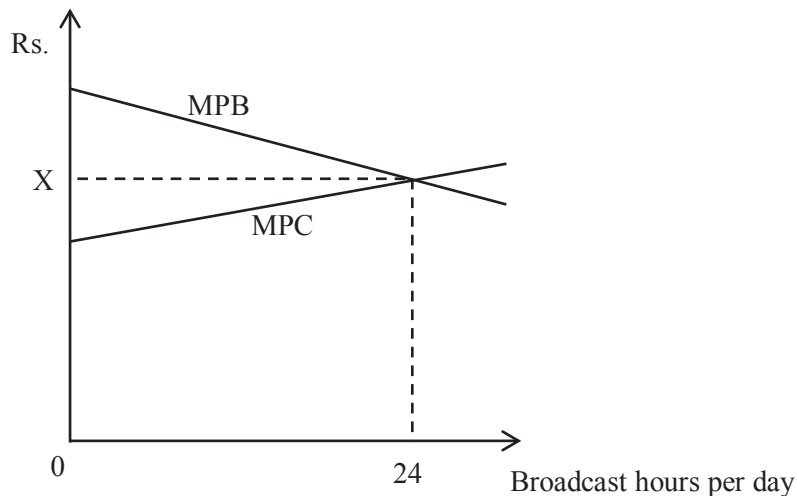
### Competition in TV Media

Broadcasting technology has improved significantly since then. Today, the network of signal-carriage offered through satellites, towers, and cables remains a natural monopoly and telecom regulatory authority of India (TRAI) auctions the rights to signal-carriage to different media firms. Importantly, however, the newer technology is such that it allows media firms to offer content through multiple channels charging a price to viewers for each channel and excluding those who do not pay. Over the years the demand for television viewing has increased significantly and the technology-induced excludability feature has made it possible for media firms to make a profitable business in this market. Thus, the content provision service is no more a pure public good as Doordarshan used to be. In fact, these changes have introduced competition in the market for content provision and the broadcast space is inundated with channels. Free enterprise and competition has had its advantages – Viewers have a wide variety of channels to choose from, which broadcast myriad of combinations of news, sports, entertainment, and spirituality offered in various Indian languages and English. And, product differentiation among channels has meant that they are offered at different subscription prices.



Conceptually, the monthly subscription price and the hours of daily broadcast on a channel are decided by the perceived marginal private benefit (MPB) to a representative viewer in accessing an additional hour of broadcast and the marginal private cost (MPC) to a media firm in delivering an additional hour of broadcast. As shown in Figure 1, the MPB line and MPC line intersect each other at the combination of Rs. X and 24-hour broadcast level. At any level of broadcast which is lower than 24-hours, MPB to a viewer is higher than Rs. X and MPC to a media firm is lower than Rs. X. Therefore, from the point of view of the viewer and the firm, a 24-hour channel offered at Rs. X as the subscription fee maximizes both viewer benefit and firm profit. Of course, to the extent that channels air advertisements, we assume that MPB and MPC include the advertisement related information benefit to the viewer and cost reduction to media firm, respectively.

**Figure 1: Provision of a TV Channel where  $MPB=MPC$**



## 2. Externality: A Source of Market Failure

In the entertainment segment itself, there have been a plethora of 24-hour paid channels dedicated to movies, movie songs, light music and dance, comedy shows, reality TV shows, and a few others; however, until a few years ago, there was no 24-hour channel dedicated to Indian classical music and dance. Free market and competition had failed to serve this genre of entertainment. Why this might have happened? As we understood from description of Figure 1 above, a channel will get provided on TV on the basis of MPB to a viewer and MPC to media firm. In most cases, MPB also coincides with marginal social benefit (MSB). Therefore, free

market and competition results in delivery of a socially desirable channels and hours of broadcast at appropriate prices. However, as originally argued by A.C. Pigou [1], if there is divergence between the MSB and MPB, then socially desirable level of a good or service will not get provided in the market. This divergence between the social and the private benefit is defined as an “externality” in the economics literature.

In the case of Indian classical music and dance, MPB of watching and learning from a channel dedicated to classical art forms would be limited to those who want to or have acquired a taste for classical music and dance. Their willingness to pay will be lower than MPC of offering such a channel, and, importantly, it will be much less than the MSB arising out of preserving and promoting Indian classical art forms. From the revenue point of view as well, there would be a limited numbers of potential subscribers to such a channel. Furthermore, channel will not attract revenue-generating advertisements since subscriber pool is very low. However, classical music and dance provides scientific foundation of and inspiration for the continued evolution of folk, light, and semi-classical art forms. It also represents the rich heritage of Indian tradition that has been preserved going back to many millennia. Therefore, though MSB of classical art forms is very high, left to free market and competition, MPB (& MPC) alone does not contribute to offering a dedicated 24-hour TV channel for Indian classical music and dance. The positive externality arising out of promotion of classical music and dance does not get internalized by free market<sup>2</sup>.

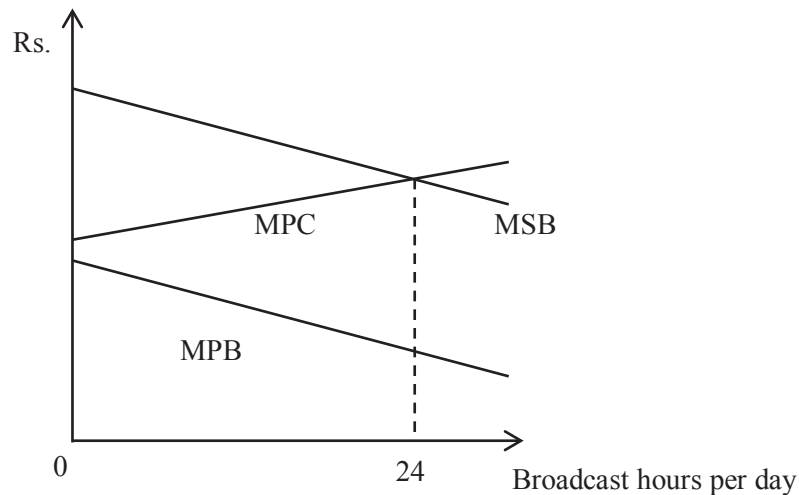
The graphical presentation of the positive externality associated with classical art forms on TV channel is made in Figure 2 below. If left to free market, MPB and MPC never intersect, for MPC is always higher than the MPB. Therefore, free-market will not offer a dedicated channel for classical music and dance. This channel will be missing from the plethora of paid channels offering news, sports, entertainment, and spirituality on TV. However, Figure 2 also indicates that the MSB of such a channel can be very high. If one considers the MSB of watching such a channel in relation to MPC of offering such as channel, then there is a market for a 24-hour

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<sup>2</sup> A standard example of externality is provided in terms of cost of pollution. When a firm produces steel, it generates and releases smoke in the environment. The social cost of steel production is very high as the smoke pollutes the environment. And still, the firm will produce too much steel than what is socially optimal, for the cost of environment pollution does not enter the profit and loss account of the firm. Therefore, this externality is internalized by government levying green (pollution) tax or deciding on limiting production of the firm. Ban on consumption of drugs and alcohol or high taxes on alcohol are some of the stylized policies aimed at internalizing the negative externalities associated with consumption of drugs and alcohol.

channel for classical art forms. The recognition of relatively higher MSB implies that the externality has to be internalized by either government providing such a channel, government subsidizing private media to offer such a channel, or offering such a channel through corporate social responsibility (CSR) funding.

**Figure 2: Divergence in MPB and MSB for TV Channel**



Today, while most TV channels are priced and have a huge subscriber pool, a new channel titled “Insync”, dedicated to Indian classical music and dance has been offered free of cost. This channel is offered free and exclusively on Tata Sky Channel No. 833. The channel was started by an Indore based visionary musician Ritesh Tagde, founder of Perfect Octave, a company that emerged from its earlier avatar, Sarasvati Sangeet Vidyalaya. The channel would not have had a large pool of subscribers compared to other channels. The channel, however, appeals to CSR initiatives of firms and seeks advertiser funded programming (AFP). Aditya Birla Group has been supporting the channel programmes as part of its CSR initiative. Presence of Insync channel is a recognition of the fact that unless the strong positive externality is internalized, free completion would lead to a missing market. By offering a free channel through CSR, private sector has turned Insync into a pure public good without government intervention! The case for a dedicated weather channel on TV seems very similar and perhaps much more urgent. There is a missing market for a 24-hour weather channel on Indian TV. I take up this aspect next.

### 3. Demand for Weather Channel

Today, from Aastha to Zee, not 26 but hundreds of channels are offered on the Indian TV round the clock. However, there is not a single channel dedicated to 24-hour weather forecasting. Somehow, free-market and competition has failed to contribute to starting such a channel among the run-of-the-mill paid channels. Therefore, the questions to ask are – Is there a case for sufficient benefit accruing due to a weather forecast channel, and, whether or not there exists an appropriate technology to offer a 24-hour weather channel on TV. As described below, one can think of three aspects of weather variations which point to the latent but huge demand for a dedicated weather channel.

#### Dynamic Weather Variation

India is one of the world's most disaster prone countries. Variability in her climatic conditions over time at a given place coupled with high degree of socio-economic vulnerability implies that losses due to extreme weather changes are very high in India. As per the Germanwatch report, in terms of impact of extreme weather, India's material losses to GDP in the year 2013 were valued at 15 billion PPP US Dollars; she had ranked 3rd on the criteria of overall Global Climate Risk Index, and worse, with a loss of 7437 persons she had ranked 1st on the criteria of disaster fatalities [2]. Importantly, in countries like India, not even 10 per cent of direct losses are insured. These losses show that there must be demand for weather forecast services which has not been met so far. Dynamic variation in weather patterns in the otherwise seasonally stable climate of a particular region does occur once in a while but it is highly unpredictable. For example, in an otherwise stable climate condition, there could be sudden cloud burst in Himachal Pradesh, flash floods in Kerala, cyclone in Eastern peninsular states, massive hailstorms in the parched Deccan plateau, tormenting rains in Western ghats, or loo (hot, dry, dusty, strong winds) sweeping northern plains. A detailed list of such weather related adverse impacts are documented by Indian Council of Agricultural Research (ICAR) in its Handbook of Agriculture [3]. Such dynamic variations in weather patterns for any given region imply that all stakeholders could alter their decisions depending upon early warning weather forecasts. National resources saved as a result of such adjustments would be in billions of rupees and thousands of lives.

Disaster management efforts have significantly improved in India in the recent past. Anticipatory relief operations in Orissa during cyclone Fani in May 2019 were exemplary.

However, such disaster management presupposes pro-active anticipation of adverse weather conditions not just by government but by all stakeholders. It is not just about Orissa that billions of rupees could have been saved for the people and the country. Similar situations arise in other parts of the country at irregular intervals. For example, if the city of Mumbai knows with 70 per cent chance that it will be hit with stormy rains in the ensuing 48 hours; stakeholders can adjust their activities in all walks of life and save themselves, city administration, and the country a whole lot of inconvenience, financial loss, and fatalities. Same would be true in other cities, towns, and importantly for farming communities in rural areas across the country. For example, with extreme changes in weather, crop yields are lowered significantly and agricultural produce becomes more vulnerable to spoilage. In a developing country like India, such spoiled produce ends up in the food chain raising food safety concerns.

#### Micro Weather Variation

Similarly, it is not just about extreme weather conditions that people are concerned about. Forecast is equally important for knowing unusual weather patterns which may not necessarily be in the nature of extreme natural disasters. For example, if there is a good likelihood of an unseasonal light rain, high humidity or mild frost; a groundnut farmer is more likely to advance harvesting prior to such weather change; else the farmer runs the risk of having higher levels of fungi in the groundnut pods. High levels of fungi, in turn, contribute to high levels of aflatoxins in the groundnut inside the pods. Higher levels of aflatoxin in groundnut is a health hazard, for the aflatoxins finds their way in the food chain through processed groundnuts, animal feed, *chikkis* and peanut-butter purchased by consumers. If the groundnut, animal feed, and/or peanut-butter are being exported, exporters may face non-tariff barrier due to stringent permissible limits on aflatoxin by the importing countries. This has happened to quite a few Indian firms who export peanut-butter.

Similar instances can be given for other crops in terms of quality, safety, and wastage of produce. It is not just groundnuts but crops such as wheat and maize are also affected by aflatoxins due to sudden hot and humid conditions. Sudden warmer conditions are also congenial for increase in fly and insect population. Risk of diarrheal diseases increase when such flies and insects carry bacteria from animals and faeces and land on meals. According to World Health Organization (WHO), food contaminated with bacteria, viruses, parasites, toxins,

or chemicals causes 420 thousand people to die every year and more than 0.6 billion people fall ill. One estimate suggests that about \$95 billion are lost due to low productivity caused by unsafe food in low- and middle-income economies [4]. Farmers are an extremely intelligent group of people. What they need is timely information. In the absence of early-warning weather information, they are unable to readjust their farming activities. Thus, forecasts about unseasonal micro weather variations can save losses across the agricultural value chain. Also, a medium to long term forecast of drought or late monsoons can help farmers plan delayed sowing and other farm activities or even advance their plans for installing drip irrigation on their fields. In fact, ability of real-time adjustments in plans by various stakeholders in anticipation of adverse weather conditions may lower insurance premiums due to lower expected losses.

### Spatial Weather Variation

India is a country of continental proportions and geographical diversity. If there are deserts regions ranging from Kutch, Rajputana, to Ladakh; there are tropical rain forests along the Malabar coast, Konkan, and the parts of North-East. If there are alluvial riverine plains ranging from Punjab, Bihar, to Bengal; there are tropical hilly areas like Sahyadris, Aravalis, and Vindhyas. Similarly, if there are vast dry-lands of the Deccan, there are snow-clad mountainous terrains in Himalayas and the Shivaliks. These differences mean that there is spatial variation in weather conditions across the country at any given point in time. They reflect weather variations in terms of temperature, humidity, fog, rainfall, wind-movement, exposure to sun, and a few more parameters. Therefore, accurate weather prediction is important for traders and tourists, businessmen and bureaucrats, rail-passengers and road-transporters, postal servicemen and pilgrims, and many more; who travel throughout the length and breadth of the country. All these itinerant stakeholders can alter their travel plans if they anticipate destination weather conditions well ahead of time. National resources saved as a result of such adjustments would be in billions of rupees per year.

### Private Benefit Vs Social Benefit

Clearly, there must be a latent demand for a 24-hour TV channel on weather forecasting. The potential for such demand is also supported by the fact that as early as in 2007, more than 50 per cent of Indian households had personal or community based access to TV [5]. Today this access is substantially higher. However, the latent demand and access to TV does not get translated into existence of a 24-hour weather channel. This happens because the expected private benefit

perceived by each stakeholder for the isolated cases of adverse impact is too small to demand and pay for a 24-hour weather channel. However, with the network of economic activities and the value-chain linkages across primary, secondary, and tertiary sectors within the country and the rest of the world; the integrated social benefit to a stakeholder of a dedicated 24-hour weather channel would be much higher than the narrowly viewed private benefit perceived by the stakeholder individually. This is a stylized case of MSB being much higher than MPB. There is positive externality in offering the service of a weather forecasting channel on TV. The 24-hour weather channel can be considered as a merit good, where if market is left to itself, free competition would fail to internalize the positive externality.

As depicted in Figure 2, MPB and MPC would be such that a market for 24-hour weather channel remains missing from hundreds of channels that clutter the TV set. However, if one considers the MSB in relation to the MPC, then there is a strong case for 24-hour weather channel on TV. In the earlier section, the divergence between MSB and MPB for a channel on classical art forms was based on the perceived or intangible higher social benefit which could not have been measured in rupee terms. In the case of weather channel; however, the MSB can be measured in the form of saving integrated economic losses to affected stakeholders in the value chain as also the attendant fatalities. This only highlights the urgency of having a 24-hour weather channel on TV. Of course, one may understand the demand for weather forecasting services; however, a pertinent question to ask would be – Why provide weather forecast through a 24-hour TV channel? Aren't there other sources of dissemination of weather forecast? I turn to this issue next as I discuss the supply side of weather forecast service.

#### **4. Existing Supply of Weather Forecast**

##### Newspapers and TV News

The traditional way of providing weather information has been through the newspapers. Some readers would recall that decades ago newspapers would report previous day's maximum and minimum temperature in the leftmost column of the front page. This was no forecast. This was akin to driving a car by watching in the rear-view mirror! That practice still continues now but in somewhat improvised form, where newspapers like Times of India give forecast of maximum and minimum temperature for the day, if not for the previous day. This kind of information is

hardly useful to most stakeholders except that it creates occasional buzz among the people at work with spurious discussions on that day's temperature and 'climate change'.

TV news channels do not offer anything better. A few minutes spent on weather information give a brief overview of temperatures at various cities in India. A simplistic animation image of a truck with the logo of the sponsoring firm moves around the map of India giving maximum and minimum temperatures at different cities for the day gone by. Perhaps the TRPs (television rating points) for a channel increase only when they repeatedly show the devastation caused by an extreme weather condition in one part of the country or the other. But then, this is no weather forecasting. DD Kisan and Krishi Darshan programmes on government TV channel do provide information on various developments in agriculture, but again, they hardly focus on dissemination of early-warning weather forecast.

#### IMD and C-DAC Websites

India Meteorological Department (IMD) of Ministry of Earth Sciences has up-to-date information on its website and provides forecasts of various durations [6]. INSAT 3D and IMD radars show real time lightning images and 5 day forecasts in their All India Weather Warning Bulletin posted on the website. Similarly, extended forecasts and outlook for next two weeks are also provided. However, most citizens do not know that they can access such information from IMD website. Government offices are not expert in marketing their services! Moreover, even if one visits the website, one finds that information is not user friendly. One finds computer graphs, detailed bulletins in small font in English, and some visuals of India's map with many icons and colour-mappings which require understanding of the associated technical terms, legends, icons and colours. Even if one were a smart citizen who can navigate effectively on the website, he/she will feel inadequate to search for exact hot-link to get forecast for a particular town for a particular period. Clearly, the website is not user-friendly even if one were to know that such website exists. Similarly, Agromet, the Agricultural Meteorological Division's website has similar features of inaccessibility and some of its hot-links takes one back to IMD site itself.

Centre for Development of Advanced Computing (C-DAC), the research and development arm of the Ministry of Electronics and Information Technology also offers a Website titled Anuman which gives weather forecast [7]. It provides hour to hour weather forecast over 50,000



locations using a weather model generated using its PARAM Supercomputer. Three-day forecast on rain, humidity, and temperature are also offered. C-DAC also uses Weather Research and Forecast (WRF) model of National Centre of Atmospheric Research (NCAR), USA [8]. This model is used to give high-resolution weather simulations as a decision support for various user stakeholders. In fact, Anuman is now also available on mobile. However, Anuman too faces similar challenges in terms of its accessibility and use by citizens. A stakeholder is not given a pro-active early warning but he/she has to constantly look up Anuman to see if any adverse conditions are emerging. Engagement of farmers with the Kisan Call Centres established by Ministry of Agriculture is very similar. It is the farmer who has to call to know the weather. This approach is extremely inefficient. To give a simile, if one wants to get up early in the morning at 5 am, one does not disturb one's sleep by constantly checking for time every hour. One goes to bed peacefully with the confidence that the alarm will go-off at the opportune time. Something similar must happen to weather forecast, where a pro-active early-warning gets issued to relevant stakeholders in different regions.

#### Forecast for Airlines and Cricketing Events

It must be noted that airports and pilots need latest updates on weather forecast. Too much is at stake if civil aviation industry (as also air force) ignores weather updates. Low and behold, IMD does offer meteorological services for civil aviation. Significant Meteorological (SIGMET) information is transmitted by IMD from its meteorological watch offices, flight information centres, and area control centres to aircrafts in flight. At the aerodromes, prior briefing is available and depending on the weather situation, meteorological officer may insist that the pilot in command of a flight be present personally for briefing [9]. Thus, weather forecast in real time is provided where there is an obvious expression of societal requirement. In fact, as we write, private Indian weather service providers such as Skymet Weather Services, Express Weather and Weather Risk Management were toying with the idea of helping major private event organizers to skirt potential disruptions by scheduling events at a particular location and time based on weather forecast. Skymet Weather Services, in particular, was working on a pilot project for a major cricket league [10]. These initiatives show that whenever MSB gets adequately revealed in the market through MPB, weather forecasting services get offered. As described earlier, that has not been the case with millions of farmers and other stakeholders spread across the country. Importantly, however, if airline pilots can be provided with quick alerts and cricket organizers

can be provided with medium to long-term forecast, the same can and must be done to millions of farmers and other stakeholders in the economy.

## **5. A Free Dedicated TV Channel for Weather Forecast**

### Area Delineation and Weather Data Sources

Fortunately, efforts have already been made to delineate major agro-climatic regions of India. The regions are delineated on the basis of climate, natural vegetation, soil, and other physiographics. During the 7<sup>th</sup> Five Year Plan, 15 such agro-climatic regions were identified. These 15 regions were further sub-divided into 127 Agro-climatic Zones (see Figure 3) through the National Agricultural Research Project (NARP) initiated by ICAR. The delineation of zonal boundaries is in terms of districts, talukas and tehsils, or even their further sub-divisions. Similarly, there are 263 Agromet observatories of IMD across India which collect weather data on a daily basis.

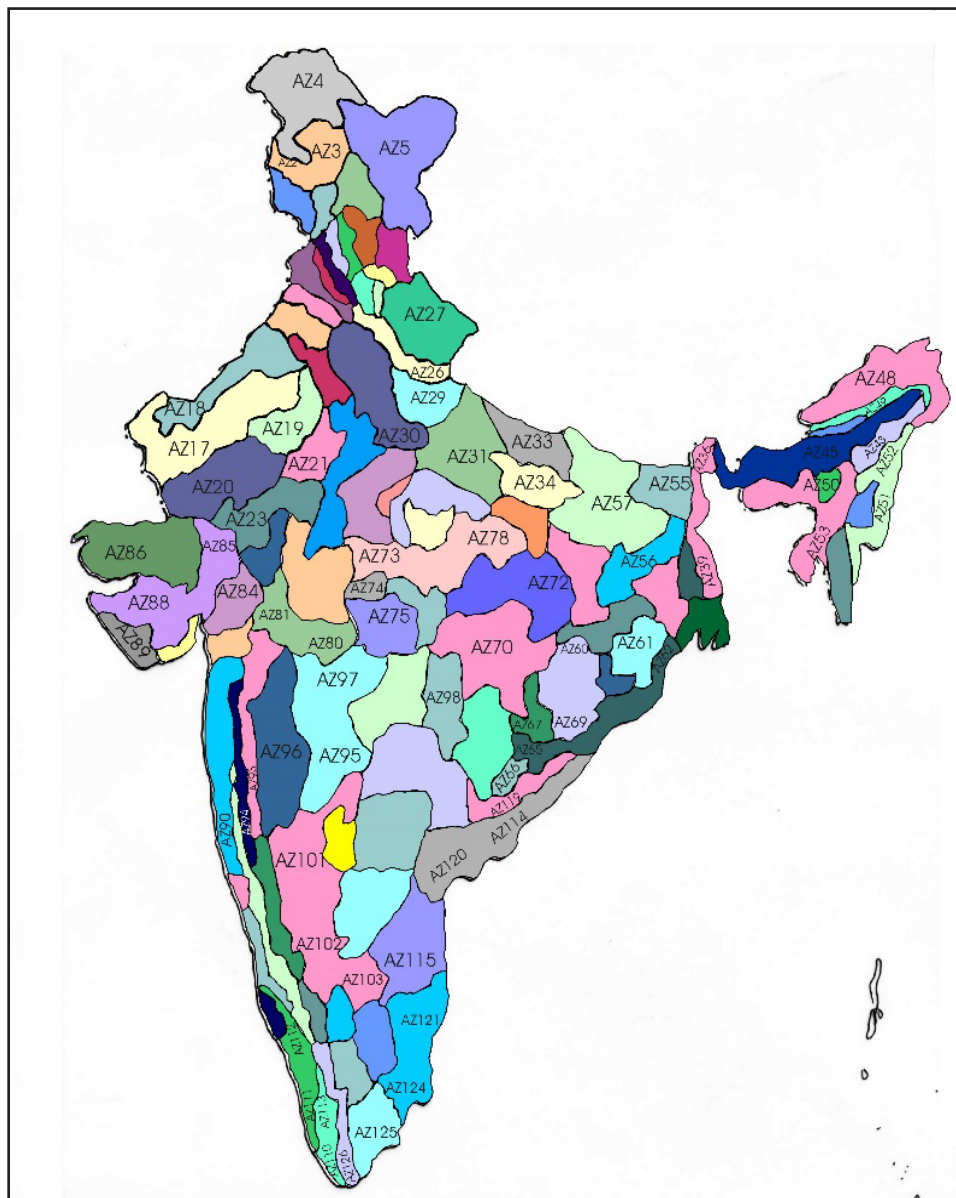
As mentioned in the previous section, IMD and C-DAC have a robust on-ground data collection infrastructure and forecasting models. Of course, one cannot forget the role played by Indian Space Research Organization (ISRO) in collection of data for such institutions. For example, ISRO satellite Oceansat-2, among other things, provides data for forecasting of sea state, sea surface wind vector, coastal climate and weather. Similarly, INSAT series of satellites have been providing data for understanding cloud motion, cloud top temperature, vapour content, and facilitates rainfall estimation and cyclone tracking. Moreover, ISRO has also designed and developed ground-based observation systems such as, Automatic Weather Station (AWS), Agrometeorological Tower, Doppler Weather Radar (DWR) as well as Vertical Atmospheric Observations System. These ground-based systems augment the space based observations of ISRO [11]. Therefore, an integrated approach to weather forecasting can be adopted, where IMD, CDAC, ISRO and NARP come together to develop hourly, 6-hourly, 3-day, 5-day as well as the medium and long-term forecasts for all 127 agro-climatic zones of India.

### TV Content and Delivery

Importantly, coordinated efforts of IMD, CDAC, and NARP should be translated into real-time user-friendly computer generated moving graphics which can be broadcast on TV on a dedicated TV channel on an on-going basis. The key to the successful content delivery would be to show

moving graphics of the forecasts that are made at the national, state, district and taluka level. The moving graphics could capture prospective movements of winds, humidity, precipitation, temperatures and other parameters using viewer-friendly visuals and legends superimposed on intended maps. Zoom-in and zoom-out features could be incorporated between macro and micro level forecasts. Importantly, well trained professional weather-news

**Figure 3: NARP Agro-Climatic Zones in India**



Source: <http://www.imdagrimet.gov.in/node/290>

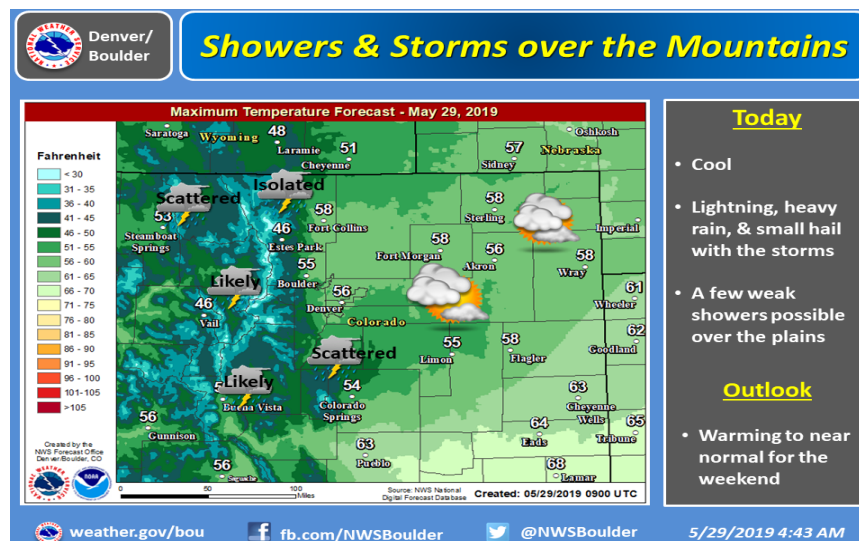
anchors should be employed to convey the forecasts while the moving graphics of the forecast get displayed. Representative snapshots of a typical macro and micro level weather broadcast on US TV are shown below in Figures 4 and 5, respectively. This approach would serve the stakeholders much better than populating IMD and C-DAC websites with statistical numbers, technical jargon, and scientific graphs.

**Figure 4: A Macro Weather Forecast using Moving Computer Graphics**



Source: Internet images

**Figure 5: A Micro Forecast at Local Level using Moving Computer Graphics**



Source: Internet images

A half-an-hour module could include the general macro weather forecast at the global and national level for 5 minutes, state specific forecasts for 5 minutes, and taluka-level forecast for another 5 minutes. About 10 minutes could be spent on agricultural issues, farming practices, and general news. Finally, about 5 minutes could be reserved for advertisements or infomercials of the sponsors. While the duration of sub-modules can be calibrated to suit topical local needs, the full half-an-hour module can be broadcast sequentially in Hindi, English, and the state language. Moreover, this package of 3-language 1.5-hour weather forecast can be replicated throughout the day with real-time updates of the weather across the country. As mentioned in the earlier sections, India being a country of continental proportions and vast geographic diversity, crucial weather changes would always affect one part of the country or the other. Therefore, as the adverse weather conditions get developed in a particular region, district, or taluka; flash news can be broadcast at the local level through the weather channel. Importantly, a marquee could run on other channels in the specific local area requesting viewers to check the weather channel. Children, parents, grandparents, friends, relatives, or even acquaintances, on reading the marquee while watching their popular TV shows would certainly alert others regarding the impending weather disturbance. In fact, viewers may just develop a habit of viewing weather channel while surfing through their popular shows and channels. Alerts through SMS and social media could also be sent to registered users requesting them to visit the weather channel. Such pro-active, real-time weather service reaching out to communities would be extremely helpful to all stakeholders in general and farmer community in particular<sup>3</sup>.

### A Broad Business Model

As described earlier, 24-hour weather channel is characterized by positive externality in terms of substantive social benefit which free market fails to internalize. Therefore, the aim would be to offer a weather channel free of cost to TV viewers. One possibility is that the channel is offered

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<sup>3</sup> The Weather Channel (TWC), a US firm based in Atlanta, Georgia does offer a dedicated weather forecast channel. It complements it with documentaries and entertainment programming related to weather. As of September 2018, the Weather Channel was received by approximately 79.128 million US households that subscribe to a pay television service. This number compares very well with CNBC and FOX News having viewership of about 87 million households. Its sister network Weatherscan offers 24-hour automated local forecasts and former parent company, a part of IBM, offers mobile apps and online website for weather forecast [12].

on the lines of Doordarshan as a government sponsored public good. However, one may be apprehensive about government's efficiency in coordinating various stakeholder institutions and matching the professionalism of the private sector in the content delivery mechanism. This would include showcasing timely and user-friendly moving graphics of the forecast and its anchoring by professional weathermen. The other possibility is that the channel can be offered free of cost by private sector alone through its CSR initiative as has been the case with Insync channel for the Indian classical music and dance. However, it may not have best access to weather forecast infrastructure and data which the government institutions such as IMD, C-DAC, and ISRO have.

The third option and a more viable one would be to offer the free weather channel in a public-private partnership (PPP) framework. Of course, the core weather forecast infrastructure and data would come from the government owned organizations such as IMD, C-DAC, and ISRO. Broadcast of professional services of the weathermen and the moving graphic imagery of the forecast on the TV channel could best come from private media agencies. The break-even revenue could partly come from government, or better still, through CSR initiatives of private sector sponsors. Since agriculture is substantially impacted by weather, co-sponsors could include successful agribusiness firms which specialize in production of agricultural inputs such as seeds, fertilizers, pesticides, tractors as also the ones which specialize in FMCG food products. They could very well advertise their products and services which will be beneficial to farmers in getting latest information on farm products and practices. Of course, the sponsors need not necessarily be the firms involved in agricultural sector.

Development of such a free weather channel would be a watershed contribution in terms of provision of a merit good through a PPP framework and turning weather channel into a pure public good. With easy and universal access to TV among the masses, such a channel will save billions of rupees in economic costs and thousands of fatalities.

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# **CONTRIBUTIONS OF AGRICULTURE, SMES AND NON-SMES TOWARD POVERTY REDUCTION IN BANGLADESH**

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**ABSTRACT**

This paper studies the contributions of bank-based financing to agriculture, SMEs and non-SMEs in the overall poverty reduction in Bangladesh. Annual data are used from 1980 to 2015. ARDL bounds testing approach is applied for evidence of cointegration among the variables and VECM is subsequently estimated. The empirical results show that financing of non-SMEs significantly reduces overall poverty in the long run. To this effect, SMEs play a marginal role in the current state of affairs. In contrast, agricultural financing reveals, otherwise.

Key Words: Bank Credit, Agriculture, SMEs, Non-SMEs, Cointegration, VECM

JEL Classifications: O10,O11,O12

## **I. Introduction**

Agriculture and SMEs are the two pillars of utmost importance in Bangladesh economy. Both contribute to creation of jobs and income that help alleviate poverty and improvement in the quality of life. Agricultural activities primarily take place in the rural Bangladesh. SME activities are dispersed through both rural and urban areas. Agriculture is all labor-intensive. SMEs are labor-intensive and agro-based. So, both sectors complement each other. Due to size disadvantages and unique systemic risks, both sectors may not have needed access to capital that is the lifeblood of productive economic activities. The key role of agriculture in Bangladesh need not be overemphasized because it currently contributes around 16.77 per cent of country's gross domestic (GDP), and 4.5 percent of total exports, employs 47.5 per cent of the total labor force, and feeds the entire population (around 160 million). It is increasingly being recognized in the empirical economic literature that the development of a growing economy depends critically on the development of the agricultural sector (Andriessse et al., 2007; World Bank, 2008). In Bangladesh, about 70 per cent of the rural poor are concentrated in the agricultural sector. Hence, poverty alleviation is required for the rural farmers. Growth in the agricultural sector has important links with the overall economy through various channels. First, agriculture provides crucial supplies of raw materials to many other non-agricultural sectors. Second, consumption of agricultural commodities has important implications for poverty reduction of households in both rural and urban areas. Rice constitutes a major share in the consumption expenditures of the poor households. Therefore, the demand for and supply of agricultural commodities, especially food items, and their prices greatly influence the welfare of poor households. Third, the rural sector is the dominant source of supply of unskilled labor to the economy. However, changes in

global production networks and increased urbanization continue to change the character of the rural Bangladesh.

Still the agricultural sector in Bangladesh is characterized by the adoption of outmoded technology, dependence on unpredictable weather, poor infrastructure, small and fragile markets, inadequate income flows, etc. So, concerted efforts should be made to expand the rural financial system to ensure its smooth operations and thereby contribute to agricultural productivity. In turn, this would mitigate the severity of the overall poverty. Formal rural financial markets in Bangladesh comprise specialized banks, nationalized commercial banks, a sizeable number of private banks, Bangladesh Rural Development Board (BRDB), as well as NGOs. Informal sources of credit like local moneylenders, friends and relatives also significantly contribute to the rural economy of Bangladesh. For farmers, transaction costs are still comparatively high with inadequate access to formal credit. For informal lending, such costs are even much higher.

A large number of Bangladesh's farmers live in extreme poverty (below \$1.25 income a day). They are unable to increase production easily, since they lack needed capital for investment in modern technology. They are also highly vulnerable to natural disasters. While they tend to have large families, they are often unable to send their children to schools and often lack sufficient foods for the family unit (Rahman, 2007). Achieving the Millennium Development Goal (MDG) of halving poverty to 26.5 percent in the non-farm sector (World Bank 2009) is remarkable. However, economic and institutional constraints, the country's geographical and demographic characteristics, and its vulnerability to natural disasters, make poverty mitigation a very challenging task. Moreover, they would further complicate achievement of the newly focused Sustainable

Development Goal (SDG), while 13 percent of total population still live in extreme poverty earning less than \$1.25 a day.

The SMEs are quite dominant in the industrial structure of Bangladesh. They comprise over 90% of all industrial units. Together, the various categories of SMEs are reported to contribute between 80 to 85 per cent of industrial employment and 23 per cent of total civilian employment. The value added contributions of the SMEs vary from 45 to 50 per cent of the total manufacturing value added (Bangladesh Bureau of Statistics).

SMEs play a significant role in the transition of agriculture-led economies to industrial one furnishing ample opportunities for processing activities which can generate sustainable source of revenue and enhance the development process. SMEs thus shore up the expansion of systematic productive capability. They help absorb productive resources at all levels of the economy and add to the formation of flexible economic systems in which small and large firms are interlinked. SMEs are the growing force in the fastest growing economy of China, in terms of contribution to the national GDP (accounting for 40%), scale of assets, diversification of products, and the creation of employment. Similarly, the role of SMEs is well acknowledged in other countries such as Japan, Korea and all other industrialized economies for employment, reducing poverty and increasing the welfare of the society. Nearly, 11.3 million jobs are generated by non-farm establishments in Bangladesh, of which 73 per cent are created by micro enterprises. Focusing on the 10+ units, small units constitute 35.2 per cent of the total employment, followed by medium and large units comprising 8.8 and 56.0 per cent, respectively. In other words, SMEs employ 1.3 million people, constituting 44 percent of the total 10+ units employment. Small manufacturing enterprises are almost evenly distributed between rural and urban areas both in terms of number of establishments (52% and 48%,

respectively), and employment (51% and 49%, respectively). In the case of medium manufacturing enterprises, there is a higher incidence of both urban establishments and urban employment (57% for both counts). Rural location for medium units constitutes 43 percent in terms of both establishments and employment (Bangladesh Bureau of Statistics).

Over the past two and a half decades, Bangladesh has made significant progress in overall poverty reduction cutting into less than half from its high intensity level in the 1970s and the 1980s. Still rural poverty is more severe than urban poverty. Any further success on this front requires more pro-poor and inclusive growth strategies through greater financial inclusion.

In light of the above, the objective of this study is to assess the contributory roles of agriculture, SMEs and non-SMEs toward the overall poverty reduction in Bangladesh. The balance of the paper is as follows. Section II provides a brief review of the related literature. Section III outlines the empirical design. Section IV reports empirical results. Section V offers conclusions and policy implications.

## **II. Brief Review of Related Literature**

Agriculture is the main source of income among the rural poor. Relative to other sectors, agricultural growth can reduce poverty rates faster and more effectively (Christiaensen et al., 2011). Farmers' decisions to invest and to produce are closely influenced by needed access to financial instruments. If appropriate risk mitigation products are lacking, or if available financial instruments do not match farmers' needs, farmers may be discouraged to adopt better technologies, to purchase improved varieties of agricultural inputs, or to make other decisions that can improve the efficiency of their businesses. Enhancing

access to finance can increase farmers' investment choices and provide them with more effective tools to manage risks (Karlan et al., 2012a; Cai, et al., 2009).

Datt and Ravallion (2008) have demonstrated in their study that India's agricultural growth reduced both rural and urban poverty. Agricultural growth at the macro level may be beneficial for the poor than growth in other sectors. Most importantly, agricultural growth is relatively more pro-poor. Usually, there are no barriers to entry in the labor-intensive agricultural sector. So, agricultural growth will increase employment in the rural sector. Increasing agricultural productivity provides relief for both rural and urban poor by reducing food prices. Increase in agricultural production, especially by small and marginal farmers, is more effective in reducing poverty (Bezemer and Headey, 2008). In addition, the increase in agricultural production can help an increase in non-agricultural activities in rural areas.

Datt and Ravallion (2002) identified in their study on India that the flexibility of the non-agricultural sectors is higher in the states where the level of education is high, agricultural productivity is large, number of landless peasants is less and child mortality rates are low. Sabur (2004) analyzed the impact of agricultural growth on rural poverty by 0.25% in Pakistan and found that an increase in agricultural income by 1 % decreases 0.25% of rural poverty. Katircioglu (2006) examined the relationship between agricultural sector and the economic growth between 1975-2002 in North Cyprus by invoking co-integration analysis and found long-term bi-directional causality.

Chabbi and Lachaal (2007) analyzed the contribution of agriculture to economic growth and the ties between other sectors in Tunisia. The findings show that economic sectors

tend to move together in the long term. However, in the short term, the role of agriculture in leading other sectors of the economy is quite limited.

Bezemer and Headey (2008) revealed the impact of agricultural growth on economic development and poverty reduction. Their study shows that the agricultural sector has been highly neglected for a decade or so despite its vital importance. Suryahadi, et al., (2009) investigated the relationship between economic growth and poverty by means of separation of industrial and residential areas. They found that sectoral growths affect poverty in different ways. Rural agricultural development in Indonesia reduces poverty more effectively in rural areas.

OECD's 2006 report draws attention to the role of economic growth in reducing poverty and the contribution of agriculture to the economic growth. In many developing countries, agriculture is the main source of employment, national income and foreign exchange earnings. Agricultural growth reduces rural poverty by reducing and stabilizing food prices, providing employment to the rural population, increasing demand for consumption of goods and services, and transferring economic growth to the non-agricultural sectors.

Tomasz (2008) studied the role of agricultural credit in the development of the agricultural sector in Poland. This study found that the agricultural credit that are primarily funded by co-operative banks have statistically significant positive impact on agricultural growth in only two regions among country's 16 regions. This study further concluded that most important factors affecting agricultural development in Poland are average farm size and agricultural employment.

Akram, et al, (2008) used time series analysis to evaluate the impact of institutional credit on farm productivity, agricultural growth and alleviation of poverty. They found that the agricultural credit unleashed positive impact on GDP. At the same time, the impact of agricultural credit in reducing poverty was significant both in the short run and in the long run. Anthony (2010) empirically investigated the impact of agricultural credit on economic growth in Nigeria. The results revealed that agricultural variables have favorable impact on economic growth. Agricultural credits are viewed as an effective instrument for counter-cyclical agricultural output, non-oil export and GDP stabilization in Nigeria. Khan, et al., (2011) reviewed the past literature on agricultural credit in rural areas of Pakistan and concluded that agricultural credit not only improved the farming but also effected every other sector of the economy in a positive way.

The growth of labor-intensive industries ensures greater involvement of the poor and better utilization of cheaper inputs. The utilization of low-wage workers in the production process (low wages are high enough for reducing poverty and low enough for market competitiveness) works to the advantage of the labor-intensive industries. Simultaneously, it is helpful in poverty reduction. Sen (1960) and Myrdal (1968) emphasized the role of labor-intensive industrialization in poverty reduction. The utilization of labor and human capital accumulation of the poor for poverty reduction is important (World Bank, 1990).

In recent years, the importance of SMEs for their contributions in economic growth and development gained worldwide recognition. SMEs employ much more labor force than the huge multinational corporations, (Mullineux, 1997). Due to dynamic and evolutionary nature, small firms serve as agents of change (Audretsch, 2000). SME sector has been a source of concern for the policy makers for the accelerated growth in developing nations.



SMEs are a major source of potential employment in low-income countries. That is why these enterprises are considered to be the “engine of growth” (Advani, 1997). The initiatives for the promotion of SMEs by the governments of the recent times, especially in developing countries, are underway (Feeny and Riding, 1997). Wider economic and socio-economic objectives such as poverty alleviation can be achieved by developing the SMEs (Cook and Nixon, 2000). There is a low cost associated with the job creation in SMEs and these enterprises are more labor-intensive than the larger firms [Leidholm and Mead, (1987); Schmitz, 1995)].

Since the SMEs are more labor-intensive, they are more likely to be located in rural areas and smaller urban areas. So development of the SMEs may be helpful for the economic satiability, growth and employment. The dispersion of these enterprises in these areas and their labor intensity may be very important in fair distribution of income than the large firms. The development of SMEs helps the economies grow in the long run. Moreover, these enterprises improve domestic market efficiency and use the scarce resources productively (kayanula and Quartey,2000).

Mukras (2003) suggests a set of policy recommendations for poverty alleviation through strengthening of SMEs. Strengthened SMEs generate employment and economic growth. The proponents of SMEs argue that entrepreneurial and innovative ventures in SMEs help improve economic growth and poverty mitigation in developing economies (Beck et al., 2004). Small enterprises enhance competition and entrepreneurship resulting in economy-wide benefits in terms of gains in efficiency, innovation and productivity. Gebremarian et al.,(2004) analyzed the relationship between development of small businesses and the incidence of poverty. Likewise, Beck et al. (2005) explored the relationship between SMEs’ growth and poverty level. They found a strong negative

relationship between them. This underscores the importance of SMEs in the overall poverty reduction. The Small and medium enterprises are more labor-intensive. So growths in these enterprises generate more employment than the growth in large industries (Snodgrass and Biggs, 1996). To be more specific, SMEs generate income and employment in the economy (Lukas, 2005). Aina and Amnes (2007) suggest effective and fully funded policy programs for the development of SMEs in Nigeria, for generating employment opportunities and improving economic growth prospects thereby to empower the poor and the deprived.

The adoption of growth strategies for labor-intensive SMEs boosted economic growth with low income-inequality in the Republic of Korea and Taipei, China during 1950s - 1990s (Li and Lou, 2008). Larger absorption of rural surplus-labor and reduction in urban unemployment due to promotion of small and medium enterprises helped these economies grow further with low income-inequality. However, China experienced robust economic growth since 1980 with rising income-inequality. To add further, the SME sector plays a vital role in development, employment generation and poverty alleviation in African economies. About 85% of the total manufacturing employment in Ghana is provided by the SME sector. This sector consists of 92% of businesses and contributes 70% of the GDP in Ghana. In South Africa, this sector contributes 52-57% of GDP and provides 61% of total employment. SMEs constitute 91% of the formal businesses in South Africa (Abor and Quartey, 2010).

Agyapong (2010) discusses the role of micro, small and medium enterprises (MSMEs) in poverty alleviation in Ghana. The author is of the view that town and rural based MSMEs help create jobs and increase income of the people. This increased income helps the people to obtain better schooling, health facilities, and empowers them to get rid of

vicious circle of poverty. Furthermore, growth in small and medium enterprises (SMEs) also contributes to human capital through on-job training. The author is also of the view that MSMEs also contribute in the increase of tax revenue of the government.

### **III. Empirical Design**

Several methods are available to test for the existence of long-run equilibrium relationship among time-series variables. The most widely used methods include Engle and Granger (1987) test, maximum likelihood test following Johansen (1988, 1991) and Johansen- Juselius (1990) tests. These methods require that the variables in the system are integrated of order one i.e.  $I(1)$ . In addition, these methods suffer from low power and do not have good small sample properties. Due to these drawbacks, autoregressive distributed lag (ARDL) bounds testing approach to cointegration has become popular in recent years.

This study thus employs ARDL bounds testing approach to cointegration following Pesaran, et al. (2001). This methodology is preferred to classical cointegration procedures, as it has certain advantages over them. For example, it can be applied regardless of the stationarity properties of the variables in the sample. It allows for inferences on long-run estimates which are not possible under classical cointegration procedures. Furthermore, ARDL model can accommodate greater number of variables in comparison to Vector Autoregressive (VAR) models.

The time series data for each variable have to be tested for unit root. This testing is necessary to avoid the possibility of spurious regression. If data are found  $I(0)$  or  $I(1)$ , the ARDL approach to cointegration is preferably applied consisting of three steps. First, the existence of long-run relationship between or among the variables is established by

testing for the significance of lagged variables in an error-correction mechanism regression. Then, the first lags of all variables in level are added to the equation to create the error-correction mechanism equation for performing additional test by computing the joint F-test on the significance of all the lagged variables. Second, the ARDL form of equation is estimated where the optimal lag-length is selected by the Akaike (1969) Information criterion (AIC). Subsequently, the restricted version of the equation is solved for the long-run solution.

An ARDL representation is specified as follows:

$$\Delta LPOV_t = \beta_0 + \sum_{i=1}^p \beta_i \Delta LPOV_{t-i} + \sum_{i=1}^p \lambda_i \Delta LSMEFIN_{t-i} + \sum_{i=1}^p \alpha_i \Delta LAGRIFIN_{t-i} + \sum_{i=1}^p \pi_i \Delta LNONSME_{t-i} + \psi LPOV_{t-1} + \gamma LSMEFIN_{t-1} + \theta LAGRIFIN_{t-1} + \rho LNONSME_{t-1} + \mu_t \dots\dots(1)$$

Where, LPOV= log of poverty level by headcount, LSMEFIN = log of total institutional credit to SMEs, LAGRIFIN=log of total institutional credit to agricultural sector, LNONSME= log of total institutional credit to non-SME sector, t=time subscript and i= 1, ..., p

For null hypothesis (H<sub>0</sub>) of no cointegration,  $\psi = \gamma = \theta = \rho = 0$

For alternative hypothesis (H<sub>A</sub>) of cointegration,  $\psi \neq \gamma \neq \theta \neq \rho \neq 0$

Third, vector error-correction model using the first-differences of the variables is estimated for the long-run solution, and to determine the speed of adjustment toward long-run equilibrium. A general vector error-correction model following Engle and Granger (1987) is specified below:

$$\Delta LPOV_t = \beta_0 + \sum_{i=1}^p \beta_i \Delta LPOV_{t-i} + \sum_{i=1}^p \lambda_i \Delta LSMEFIN_{t-i} + \sum_{i=1}^p \alpha_i \Delta LAGRIFIN_{t-i} + \sum_{i=1}^p \pi_i \Delta LNONSMET_{t-i} + EEC_{t-1} + \mu_t \dots\dots\dots(2)$$

The estimated coefficient ( $E$ ) of the error-correction term ( $EC_{t-1}$ ) is expected to be negative for long-run convergence and causal flows. If  $\lambda_i$ 's,  $\alpha_i$ 's and  $\pi_i$ 's are non-zeros, lagged changes in agricultural credit, SME credit and non-SME credit lead the current change in the overall poverty in the short-run. Their relative numerical magnitudes indicate relative influence of the relevant explanatory variable on the dependent variable. The sum of the coefficients of each lagged independent variable shows its net interactive feedback effect with other variables. Annual data from 1980 to 2015 are used. The data sources include the Bangladesh Bank (the Central Bank of Bangladesh) for sectoral bank credit disbursements, and the Bangladesh Bureau of Statistics (BBS) for the overall poverty.

#### IV. Empirical Results

The standard data descriptors are reported as follows:

**Table 1: Descriptive Statistics**

Particulars	LPOV	LSMEFIN	LAGRIFIN	LNON_SME
Mean	3.868693	8.170962	16.83558	10.63125
Median	3.904394	8.161075	17.16587	10.60342
Maximum	4.322542	10.78717	18.53099	13.04382
Minimum	3.258097	5.289529	15.13385	7.955671
Std. Dev.	0.300439	1.548283	0.961123	1.421132
Skewness	-0.441469	-0.055676	-0.033521	-0.048079
Kurtosis	2.226647	2.078421	1.777749	2.092162
Jarque-Bera	2.009076	1.256657	2.185157	1.215398
Probability	0.366214	0.533483	0.335351	0.544602

The distribution of a variable tends to be normal when its mean –to- median ratio approaches unity, skewness is low and kurtosis is below its benchmark of 3. The numerics in Table 1 suggest that distribution of each variable is approximately normal. The Jarque- Bera statistics also tend to affirm normal distribution of each variable with varying probabilities.

The pairwise correlation matrix is provided as follows:

**Table 2: Correlation Matrix**

	LPOV	LSMEFIN	LAGRIFIN	LNON_SME
LPOV	1			
LSMEFIN	-0.984404002429064	1		
LAGRIFIN	-0.833411941585218	0.852148545128005	1	
LNON_SME	-0.985107990050278	0.999801361332417	0.851496798294152	1

As observed in Table 2, credits to SME, Non-SME and agriculture have high negative correlation with poverty. However, all independent variables with positive correlation with each other indicate their interactive complementarities.

Residual-based ADF and PP tests for nonstationary and their counterpart KPSS test for stationarity are implemented to examine the time series property of the variables. All computed test statistics are reported as follows:

**Table 3: Results of Three Alternative Unit Root Tests**

**A. Augmented Dickey- Fuller Test: Null of Unit Root**

Variables	Level	First Differencing	Second Differencing	Result (Level)
LPOV	1.549741	-2.105167	-7.784701***	Non Stationary
lsmeffin	-2.844373	-5.166489***		Non Stationary
lagrifin	-1.844254	-4.112862***		
Lnon-sme	-3.440965**			Stationary

### B. Phillips-Perron Test: Null of Unit Root

Variables	Level	First Differencing	Second Differencing	Result (Level)
LPOV	2.221421	-1.975706	-7.944800***	Non Stationary
lsmefin	-2.311666	-5.249975***		Non Stationary
lagrifin	-1.844254	-9.274981***		Non Stationary
Lnon-sme	-2.511689	-4.811713***		Non Stationary

### C. KPSS (Kwiatkowski-Phillips- Schmidt-Shin) Test: Null of No Unit Root

Variables	Level	First Differencing	Second Differencing	Result (Level)
LPOV	0.769459	0.364368***	--	Non Stationary
lsmefinfin	0.140248***		-	Stationary
Lagrifin	0.771940	0.123062***	-	Non Stationary
Lnon-smeFin	0.615730***		-	Stationary

Notes: (1) The MacKinnon (1996) ADF critical values are  $-3.752946$  and  $-2.998064$  at 1% and 5% levels of significance, respectively. The KPSS (Kwiatkowski et al., 1992) critical values are 0.73900 and 0.46300 at the aforementioned levels of significance, respectively. (2) \*\*\* Significant at 1% level, \*\* Significant at 5% level, and \* significant at 10% level.

Table 3 indicates both ADF and PP tests confirm non-stationarity for LPOV, LSMEFIN and LAGRIFIN in log-levels at 5% level of significance. KPSS test results also reveal the same for LPOV and LAGRIFIN. However, it indicates otherwise for LSMEFIN and LNON-SME at the same level of significance. For LNON-SME in log- level, the null hypothesis of non-stationarity is rejected by ADF test but accepted by PP test. KPSS test rejects the alternative hypothesis of non-stationarity. Thus, evidence is mixed. To state further, ADF test is inefficient and less reliable due to its super-sensitivity to the selection of lag-structure than KPSS test. However, KPSS test also suffers from sample size distortions. The mixture of I (0) and I (1) behaviors of variables justify

implementation of the ARDL procedure for cointegration. The ARDL procedure could skip unit root testing and determination of the order of integration, though.

Consequently, the ARDL procedure is implemented as outlined in equation (1) to detect the cointegration relationship among the variables. The null hypothesis ( $H_0$ ) of no cointegration is  $\psi = \gamma = \theta = \rho = 0$  and its alternative hypothesis ( $H_a$ )  $\psi \neq \gamma \neq \theta \neq \rho \neq 0$ . The estimates are reported as follows:

$$\begin{aligned} \Delta LPOV_{t=}& 0.384961 + 0.540253\Delta LPOV_{t-1} + 0.123672\Delta LPOV_{t-2} - 0.007183 \Delta LSMEFIN_{t-1} \\ & (1.011715) \quad (2.770335) \quad (0.579969) \quad (-0.113523) \\ & + 0.002606 \Delta AGRIFIN_{t-1} + 0.006341\Delta LNON\_SME_{t-1} - 0.024847\Delta LNON\_SME_{t-2} \\ & (0.622035) \quad (0.080122) \quad (-0.742837) \\ & - 0.032062 \Delta LNON\_SME_{t-1} - 0.039019 LPOV_{t-1} + 0.034386 LSMEFIN_{t-1} - \\ & (-0.032062) \quad (-0.822551) \quad (0.405060) \\ & - 0.004369LAGRIFIN_{t-1} - 0.048625 NON\_SME_{t-1} \dots\dots\dots(1)' \\ & (-0.822239) \quad (-0.530452) \end{aligned}$$

Respective t-value of each coefficient is reported in parentheses. Adjusted  $-R^2 = 0.511852$ ,  $F = 4.236422$  and  $AIC = -6.091310$ .

Following Pesaran et. al (2001), the lower bound and the upper bound critical values of F-statistic at 5% level of significance are 2.365 and 3.553, respectively. So, the calculated F-statistic at 4.236422 clearly rejects the null hypothesis of  $\psi = \gamma = \theta = \rho = 0$ , in favor of the alternative hypothesis  $\psi \neq \gamma \neq \theta \neq \rho \neq 0$ . This confirms evidence of co-integration among the variables of interest in this paper.



The estimated long-run coefficient is reported as follows:

**Table 4: Estimated Long-Run Coefficients**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.409426	0.387183	16.55399	0.0000
LSMEFIN	-0.060140	0.086801	-0.692844	0.4939
LAGRIFIN	0.002399	0.005679	0.422489	0.6758
LNON_SMEFIN	-0.191784	0.093351	-2.054436	0.0490
AR(1)	0.865078	0.048930	17.67983	0.0000

Adjusted R-square = 0.996593; Akaike info criterion = -5.155749

Durbin-Watson stat = 1.646675 ; F-statistic =2414.223

The above empirical evidence reveals that both SMEFIN and NON\_SMEFIN have long-term negative impacts on the overall poverty level. However, the effect of SMEFIN is statistically insignificant in terms of the associated t-value. This is due mainly to the inadequate access of SMEs to institutional credit. In contrast, the long-run coefficient of NON\_SMEFIN is statistically significant at 5% level. This shows that NON\_SMEFIN has strong negative effect on poverty level in Bangladesh. Financing to large industries creates job opportunities to a notable extent as most of these industries are still highly labor-intensive (for example, RMG sector). Additionally, employees of large industries receive greater financial and non-financial benefits to dent on the overall poverty level. These benefits may not yet be available in small and medium industries. The effect of agricultural financing seems counter-intuitive with no statistical significance. This is possible due to output losses on account of natural disasters deeply hurting the rural farmers or depressed prices of farm produces after good harvests in the face of rising input costs and farmers' post-harvest inadequate holding capacity due to immediate debt repayment obligations and poor storage facilities for perishable produces.

Next, the estimates of the VECM are reported as follows:

**Table 4: Vector Error –Correction Model (VECM) Estimation**

Variable	Coefficient	t-Statistic	Prob.
C	0.021512	1.547970	0.1381
$\hat{e}_{t-1}(ECT_{t-1})$	<b>-0.235431</b>	<b>-2.334555</b>	<b>0.0307</b>
D(LPOV(-1))	0.624538	3.066790	0.0063
D(LPOV(-2))	0.522459	2.105159	0.0488
D(LSMEFIN)	-0.022209	-0.342575	0.7357
D(LSMEFIN(-1))	-0.108777	-1.234663	0.2320
D(LNON_SMEFIN)	-0.039396	-0.557200	0.5839
D(LNON_SMEFIN(-1))	0.149464	1.445674	0.1646
D(LNON_SMEFIN(-2))	-0.020536	-0.463928	0.6480
D(LNON_SMEFIN(-3))	-0.043500	-0.960388	0.3489
D(LAGRIFIN)	-0.002440	-0.509485	0.6163
D(LAGRIFIN(-1))	-0.002584	-0.567078	0.5773

$\bar{R}^2 = 0.493857$ ,  $F = 3.661073$ ,  $DW = 2.063994$ ,  $AIC = -5.896521$

The coefficient of the error-correction term ( $\hat{e}_{t-1}$ ) at -0.235431 is statistically highly significant in terms of the associated t-value. The low numerical value implies very tepid adjustment toward long-run equilibrium after a shock. Approximately, 23% of deviation resulting from the previous year's shock converges back toward the long-run equilibrium in the current year. It ensures that long run equilibrium can be attained. Banerjee et al., (1998) holds that a highly significant error correction term is further proof of the existence of stable long-run relationship.

In the short run, the sum of the coefficients of changes in financing to small and medium enterprises of current year and one year-lag period is negative indicating net negative effect on the current change in poverty level (LPOV) in the country. But the short-run coefficients of the SMEFIN are statistically insignificant in terms of the associated t-values. The sums of coefficients of other two regressors namely NON-SMEFIN and AGRIFIN are also negative

indicating that short-term net effects of both variables are negative with no statistical significance. Their statistical insignificance is the result of inadequate access to institutional credit.  $\bar{R}^2$  at 0.493857 shows that 49% of the current negative change in LPOV is due to current and lagged increases in SMEFIN, NON\_SMEFIN and AGRIFIN in the long run as well as in the short run. The F-statistic at 3.661073 reveals overall modest statistical significance of the estimated VECM. The DW-statistic at 2.063994 confirms near-absence of serial correlation. The AIC criterion is taken into cognizance to determine optimum lag-structure to overcome the problem of over-parameterization of the model and resulting bias as well as inefficiency in the estimated parameters.

Finally, the stability of the long run parameters together with the short-run movements has been examined. To this end, reliance is on cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) tests proposed by Borensztein et al. (1995). The same procedure has been utilized by Pesaran and Pesaran (1997), and Mohsen et al. (2002) to test the stability of the long-run coefficients. The tests applied to the residuals of the VECM model are shown in Figures 1 and 2, respectively (Appendix). As can be seen in the figures, the plot of CUSUM and CUSUMsq statistics stay within the critical 5% bounds. Thus, parameters of the VECM do not depict any instability. In other words, the parameters are stable over the sample period.

## V. Conclusions and Policy Implications

To sum up, each time variable tends to be normally distributed with nonstationarity depicting either I(0) or I(1) behavior. ARDL testing confirms cointegrating relationship among the variables. The estimated long-run coefficients reveal that bank loans extended to non-SMEs significantly reduce the overall poverty. Bank loans to SMES have marginal effect on mitigation of overall poverty in Bangladesh. Perhaps, this is due to their inadequate access to bank credit. However, significance for rural poverty reduction cannot be ruled out. Counterintuitively, bank loans to agricultural sector

seem to raise the overall poverty, although statistically highly insignificant. This is a likely occurrence resulting from output losses due to natural disasters or reduced prices of farm produces after good harvests despite escalation of input costs and farmers' inadequate post-harvest holding capacity due to immediate debt repayment pressure and poor storage facilities for perishable produces.

For policy implications, greater emphasis needs to be placed on SME financing by encouraging discouraged and indifferent SMEs to apply for bank credit on softer terms, as feasible. Farmers need larger access to bank credit, insurance against crop failures, reasonable price support, input subsidies, rural storage facilities, and credit for longer duration to improve holding capacity after harvests. In closing, SMEs and farmers are vulnerably exposed to diverse risks. So, risk management should also be an integral part of poverty-reducing strategies (Holzmann and Jorgensen, 2001; Christiaensen and Subbarao, 2004).

In closing, urban-centric economic growth strategy alone is not enough to reduce poverty in a significant way. There is a growing need for inclusive growth strategy to this effect.

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**Appendix**

Figure 1: CUSUM Test of Residual Stability

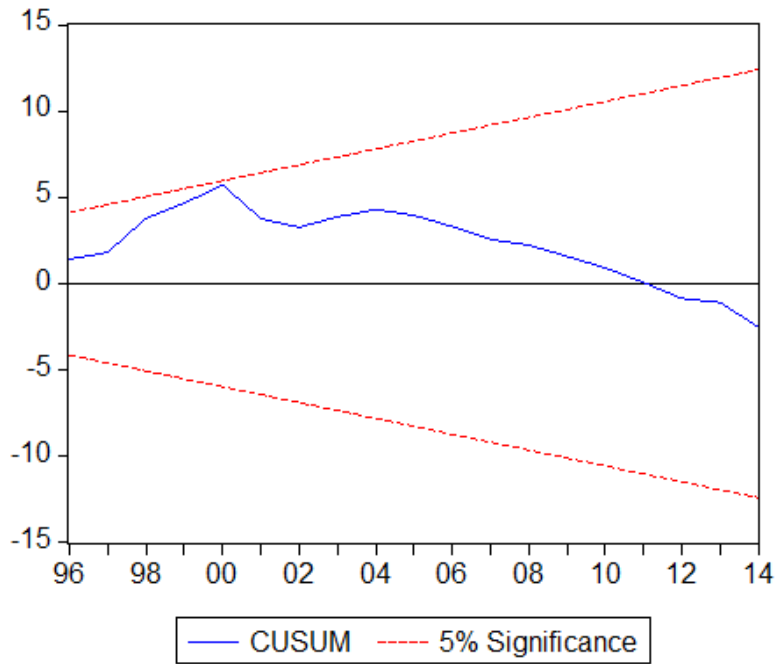
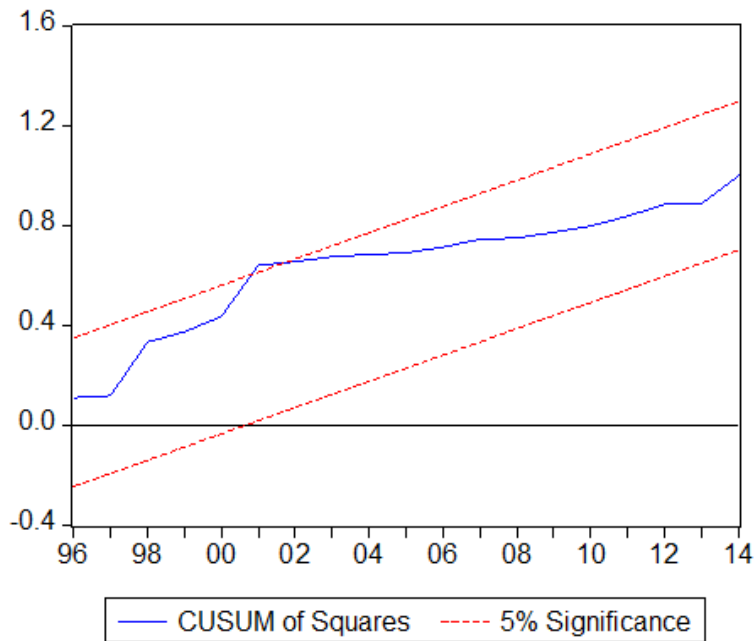


Figure 2: CUSUM Squared Test of Residual Stability



# PRIVATE UNIVERSITIES OF BANGLADESH: A STUDY ON SERVICE QUALITY, CUSTOMERS' PERCEPTIONS AND SATISFACTION

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## **1. Abstract**

*The higher education sector of Bangladesh is divided as private and public sectors in terms of the initiative of establishment. All of them are autonomous where the public universities are owned by the government and the private universities have been developed by the private sector. As the private universities produce services and sell it to the students by a comprehensive marketing effort, we can treat their services as a part of marketing. In this study, we tried to show the quality of services and the subsequent perception and satisfaction level of the stake holders regarding services are being provided by the private universities along with some recommendations to improve their service quality. For primary data, we interviewed 500 students and their guardians, teachers and staffs of private universities and also some famous educationists of Bangladesh though out Dhaka city through the cluster sampling of probability method; and we also used much enriched secondary sources of data. As our targeted readers are the mass people of the country, we did not use any complex statistical tools for analyzing or evaluating data, for their easy understanding. We used simple mean to find out the percentage of the respondents' answers on each criteria.*

## **2. Kew words**

Private university, Bangladesh, education, service, quality, satisfaction, perception; etc.

## **3. Introduction**

Private universities have captured around 60 percent students of the higher education sector of Bangladesh. As the number of seats of the public universities is limited, a large number of students are taking their education from the private universities. Private universities created a new opportunity in expanding the higher education sector of Bangladesh; and that's why; this

rapidly expanding sector is required to maintain standard of education both in quality and quantity. In this circumstance, we feel to conduct a study to evaluate the quality of education and services of the private universities of Bangladesh in broader aspects. Several researches were conducted in this area.

In the article, *The Role of Private Universities in Higher Education of Bangladesh: An Empirical Investigation* by K. M. Anwarul Islam, Umme Salma, we found that 64.71% respondents think education system of private university is satisfactory. On the other hand, 20.59% respondents said that education system of private university is not satisfactory. Private universities are not only providing education at a minimal cost but also opened-up/ create new scope/ avenue for cultural nourishment/development of the students/ learners coming from varies strata of the society(9).

In the article, *Quality of education management at private universities in Bangladesh: An exploratory study* by Ashraf, Mohammad and Ibrahim, Yusnidah and Joarder, Mohd, we found that Private education in Bangladesh is getting more competitive with the remarkable increase in the number of academic institutions in the country. The ineluctable forces of globalization in this new millennium make this growth path more complex and challenging. Despite the relentless and continuous effort of private educational institutions, quality has not yet achieved at the desired level. The cost of private education is another dimension to consider, as it is unaffordable in Bangladesh, and more effort needs to be made if costs are to be lowered. However, the system is proceeding gradually towards greater improvement (10).

The above studies were conducted on the necessity and contribution of private university or the quality of education and service of this sector, in general. Very few empirical studies have been conducted on the education system, service quality, and perception as well as satisfaction level of the stake holders of the private universities of Bangladesh; and as a result, the findings of these researches do not reflect the real scenario of the private universities on the mentioned aspects. That's why; we conducted a comprehensive study to find out the actual scenario of the private universities of Bangladesh regarding the service quality, customers' perception and satisfaction level by focusing the overall education system and service quality of the private universities; and the subsequent perception, complaints and also the satisfaction level of the students, their guardians, teachers, staffs and educationists of t Bangladesh along with their suggestions to improve the overall education quality of this tertiary education sector of Bangladesh.

#### **4. Objectives of the study**

The objectives of this study are given bellow:

- a) We will try to know the background and expansion of the private universities of Bangladesh
- b) To get a comprehensive idea on overall education system and service quality of the private universities of Bangladesh
- c) To know the perception and satisfaction level of the stakeholders regarding the education and services of the private universities of Bangladesh.

## 5. Methodology of the study

As problem is not specific and research was done through an opinion survey in field level, this is a case study method of exploratory research. It was qualitative and empirical types as we tried practically in the field level to find out the quality of the services are being provided by the private universities. For sampling, we selected ten private universities out of 105 private universities of Bangladesh on the basis of their establishment period. Primary data of the study was the records and statements of the students, their guardians, teachers, staffs and famous educationists. Primary data was collected from personal interview with respondent answer with questionnaire in survey method.

Survey was conducted during March to June, 2018 in 10 selected private universities of Dhaka city on the basis of their establishment period. Total number of samples was 500 and we followed cluster sampling of probability method for the sample allocation. We interviewed 250 students (120 male and 130 female) of these 10 universities. We also interviewed 100 guardians (40 male and 60 female), 80 teachers (50 male and 30 female) and 60 staffs (40 male and 20 female) of 10 sample universities. We also interviewed 10 prominent educationists of Bangladesh regarding these issues. Two sets of interview schedules were used: one set was for the selected students and guardians where other set was for the selected teachers, staffs and educationists. They were interviewed personally by 05 field workers appointed by us. We made each questionnaire including 50 questions of different types on the basis of the selected criteria to explore the quality of education and services of private universities in broad perspective. We prepared 700 copies of questionnaires though our sample size was 500 considering incompleteness and wastages of questionnaires.

There were also secondary sources, like UGC reports, news paper reports, relevant journals and articles. In this study, the major determinants of quality education and service were analyzed to explore the situation of education and services are being provided by the private universities. In this context, an attempt has taken to explore the quality of services of private universities in broad perspective. Within this broader area, study will explore the teaching quality, faculty selection method, faculty motivation level, research activities, educational expenses, infrastructure, library, classroom and campus facilities, curriculum, over all examinations system, campus discipline & security system, efficiency of the management, extracurricular activities, emphasis on moral uplift, international affiliation and career opportunity for the students. With these issues, we tried to search the employability and recognition of the degree. It can be mentioned that, overall research was done only from our self motivation and by self financing.

## 6. Limitations of the study

The present study has certain limitations that need to be taken into account. Certainly, a limitation of this study includes external validity, or the generalizability of the study to other contexts, since it was conducted only on 500 respondents from 10 selected private universities in Dhaka City that does not cover the overall picture of Bangladesh as a whole while the selected universities enrolled over thirty thousand students, unquestionably, this is a small population of students. Another factor that limits the generalizability of this study is the lack of knowledge, time and interest of sample

people to provide actual information or opinion; lack of time to conduct survey; freedom of the researchers to include their actual opinion in case of some sensitive issues of the private universities considering the risk of creating a negative perception of the people to this tertiary education sector of Bangladesh. As the target reader of this article is the mass people of Bangladesh, we did not use any complex statistical tools for analyzing or evaluating data. We used simple mean to find out the percentage of the respondents' answers on each determinants that may affect the standard of the technical tools of this study and the research work, as a whole.

## 7. Growth and expansion of private universities

The first private university, namely the North South University (NSU), was approved by the Government of Bangladesh (GoB) on 5 November 1992. The political government of the Bangladesh Nationalist Party (1991-1996) had a more favorable stance towards the private university sub- sector. *Figure 1* below shows that during that period, 16 private universities (mostly in metropolitan Dhaka and only two in Chittagong) came on stream. The following period of the Awami League Government (1996-2001) was not favorably disposed to the concept of a private university. Only another four private universities were added during that period. Again, with the assumption of a BNP-dominated four-party alliance government in October 2001, the private university sub-sector got a significant fillip. The official UGC figure shows (see *Figure 1*) that in the last three and a half years, the total number of private universities has gone up to 54; there has been an addition of 30 private universities in the period, i.e. on average nine to ten universities added each year. Present Awami League Government (2009 -2014 & 2014 to 2018) is very favorable to expand the sector. During 2009-2018, 51 new private universities have been established outside of Dhaka mainly in the divisional and district headquarters level. Most of these universities owned by the pro government peoples. Now, at least one private has been established in all most every district of the country.

**Figure 1: Growth of private universities in Bangladesh, 1991-2018**

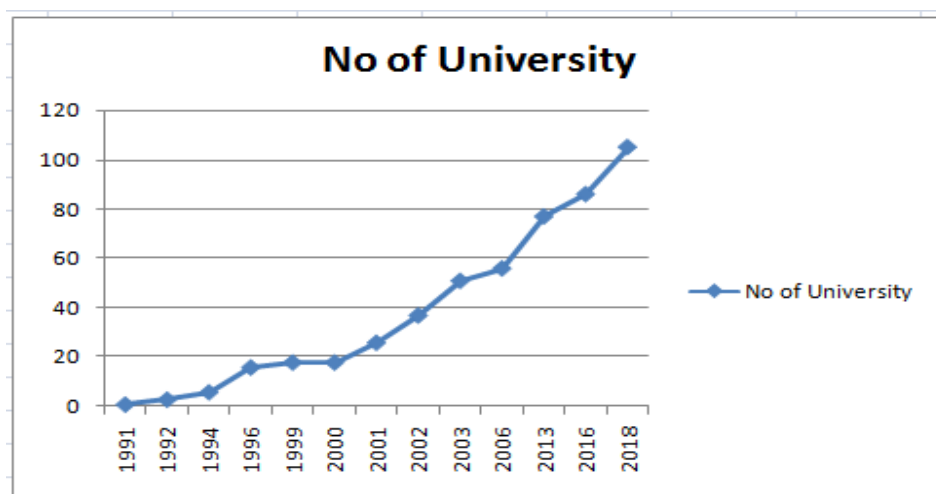


Figure 1: Growth of private universities in Bangladesh, 1991-2018

*Sources:* Personal communications with Director (Research) of UGC, Dhaka; and UGC Annual Report 2017- 2018.

## 8. Satisfaction level to the services of private universities

We asked our respondents whether they are satisfied or dissatisfied to our selected 22 determinants related to the quality of private universities of Bangladesh. We converted 500 (250 students, 100 guardians, 80 teachers, 60 staffs of 10 sample universities and 10 educationists of the country) respondents' answer into 100 and get the percentage of satisfied and dissatisfied respondents to the selected determinants separately. We did not use any complex statistical tool for this calculation. We just manually counted the answer and find out the percentage:

**Table 1: Satisfaction level of guardian, students, teachers and administrative staffs and educationalists**

Criteria	Students		Guardian		Teachers		Admin staffs		Educationalist	
	Satisfaction (%)	Dissatisfaction (%)	Satisfaction (%)	Dissatisfaction (%)	Satisfaction (%)	Dissatisfaction (%)	Satisfaction (%)	Dissatisfaction (%)	Satisfaction (%)	Dissatisfaction (%)
Quality of education	48	52	39	59	49	51	46	54	22	78
Quality control measures	42	58	55	45	48	52	45	55	25	75
Quality of teachers	61	39	52	48	83	17	50	50	27	73
Faculty selection method	70	30	55	45	81	19	46	54	21	79
Faculty motivation level	38	62	50	50	47	53	48	52	35	65
Teaching Technique	52	48	74	26	66	34	47	53	31	69
Lecturer method	75	25	36	64	93	7	26	74	18	82
Curriculum	63	24	52	48	71	19	50	50	52	48
Scope of selecting diversified subjects	23	77	26	74	38	32	44	56	27	73
Campus Discipline & Security system	47	53	34	66	63	37	85	15	61	39
Education cost	46	54	61	39	44	54	51	49	44	56
Examination system	38	62	22	78	86	14	74	26	22	78
Emphasis on moral upliftment	61	39	65	35	56	44	65	35	29	71
Students' socialization	74	26	66	34	59	41	38	62	18	82
Management & administrative efficiency	72	28	76	34	76	34	80	20	67	33
Extracurricular activities	37	63	44	56	65	35	55	45	20	80
Infrastructure and facilities	26	74	29	71	55	45	81	19	19	81
Research facility	70	30	68	32	42	58	65	35	16	84
Waiver facilities	36	64	58	42	76	24	71	29	26	74
International affiliation	52	48	56	44	63	37	61	39	51	49
Career opportunity	38	62	34	66	62	38	56	44	54	46
<b>Total</b>	<b>50.90</b>	<b>49.10</b>	<b>50.09</b>	<b>49.10</b>	<b>63.00</b>	<b>27.00</b>	<b>56.38</b>	<b>44.62</b>	<b>32.61</b>	<b>67.39</b>

Source: Survey result-2018

Only 500 samples do not represent the huge numbers of stakeholders' opinion regarding private university sector. But, from the result of this survey, we get an idea about the peoples' perception and satisfaction level to this one of the major tertiary education sectors of Bangladesh.



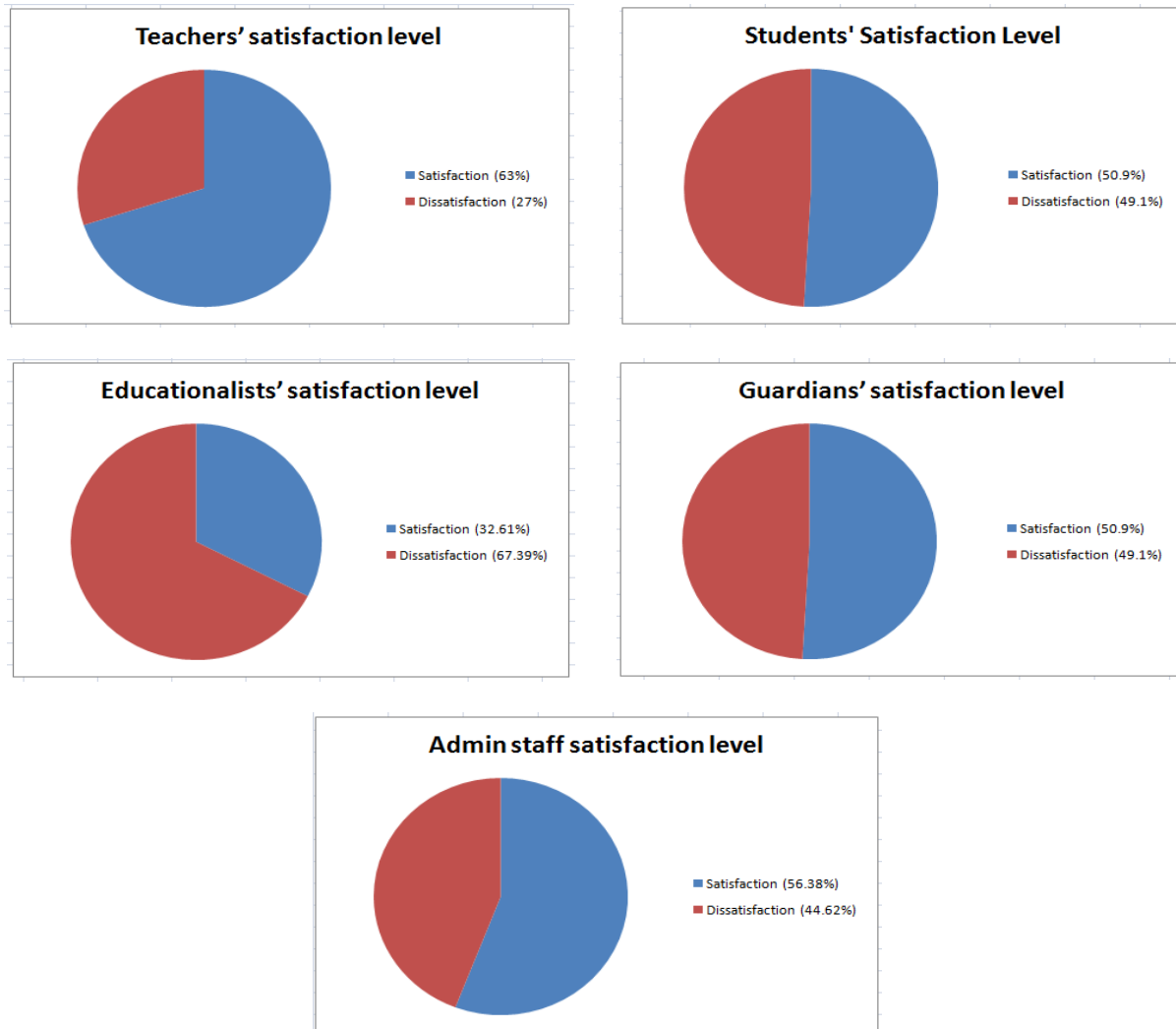
**Figure 1: Overall satisfaction level of each Group**

Figure 1: Overall satisfaction level of each Group

Source: Survey result-2018

## 9. Perceptions and criticism regarding private universities

### Quality of education

Our survey results a poor quality of education in most of the private universities of the country. Newly established universities have not started their academic activities properly. These universities lack infrastructure, adequate teachers, students and other facilities that hamper the education quality. This scenario is almost same in most of the established private universities of the country due to mismatch of the major determinants related to the quality education. The students, teachers and staffs of the private university are satisfied where the guardians and educationist can not satisfied regarding the quality of education of the private universities of Dhaka city as per the survey, we conducted.

### **Quality control measures**

University Grand Commission (UGC) has a role in setting certain minimum qualifications for recruiting teachers, in general, for both public and private universities. However, it lacks the ability to exercise such control due to politicized campuses and the weak structure of UGC. Individual institutions are left to assure the quality of education and research. Private universities try to monitor and evaluate teachers and quality of instruction through students' reports and supervision by Heads of departments. However, private universities generally do not admit brighter students, although some of them are showing strengths in developing students' potential by trained and motivated teachers and better support services. The lack of highly qualified teachers is posing a threat to the quality and expansion of private universities, as they are currently dependent on part-time teachers. Hence, quality control issues in higher education are seriously neglected both in public and private universities of Bangladesh.

### **Quality of teachers**

Regarding the faculty members, none of the students seem to be highly satisfied or dissatisfied; which is at the same time good and bad. Good because there is not much element of negative feelings about the instructors. But bad because none of the students take their instructors as their idols or think the teachers can be someone to follow. Our respondent guardians and admin staffs are moderate in their satisfaction level to teachers' quality where the teachers and educationists are in the reverse position on this issue. Our respondent teachers are highly satisfied to their quality, as expected. The educationists are very unhappy on this determinant, and they think, most of the private universities recruit substandard teachers which is a great obstacle to ensure quality education.

The supply of qualified teachers is limited in Bangladesh. Although foreign- trained teachers are sought and preferred by the private universities, perhaps North South University (NSU) has most maintained that practice so far. It does not allow teachers without a PhD to teach in the Master's program, such as the MBA, and no one without a Master's degree from the USA, UK, Canada or Australia is recruited as a lecturer. It has also established a tenure track system for recruitment at higher ranks.

### **Teaching staff, teacher-student ratios and the teaching-learning situation**

Both teacher and student numbers have grown at phenomenal rates in the period of 1997-2018 (8). The simple annual rates of growth are 100.1 per cent for students and 49.3 per cent for teachers. The teacher-student ratio hovers around 1:10 during the period of 1997-2018(8).

**Table 2: Bangladesh: number of private universities, total enrolment, teacher-student ratios, 1997-2018**

Year	No. of private universities	No. of students	No. of teachers	Teacher-student ratio
1997	16	5,668	636	1:9
1998	16	8,718	914	1:9
1999	18	13,340	1,214	1:11
2000	18	32,791	1,608	1:20
2001	26	27,245	2,205	1:12
2002	37	34,432	2,948	1:12
2003	51	46,080	4,543	1:10
2008	56	88,752	7,820	1:12
2013	77	1,77,538	10,685	1:17
2018	105	2,48,985	11,316	1:22

Source: BANBEIS, Bangladesh Education Statistics – 20018

**Figure 3: Number of teachers in private universities of Bangladesh, 2018**

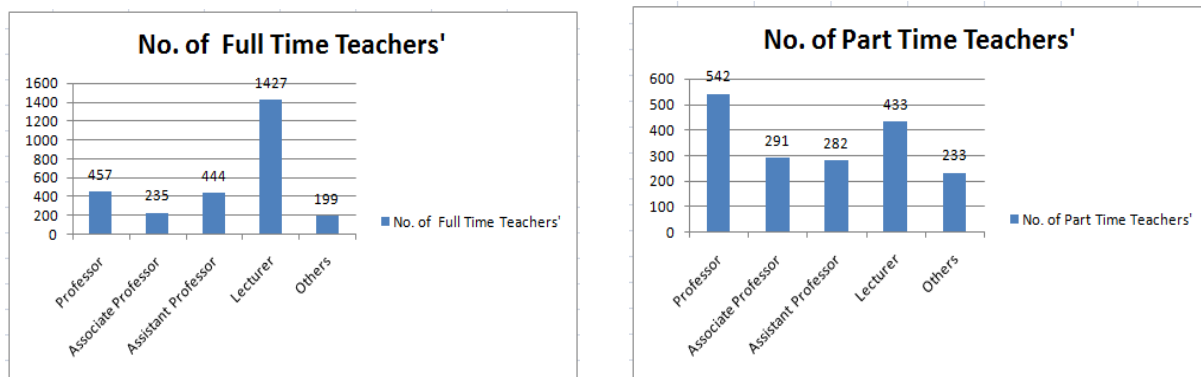


Figure 3: Number of teachers in private universities of Bangladesh, 2018  
Source: BANBEIS, Bangladesh Education Statistics – 2003, 2003, Dhaka.

Figure 3 shows that out of 11,316 teaching staff-members, roughly 60 per cent are full-time faculty; therefore a significant number are part-timers – very likely they are from public universities in and around the city where the private universities are located. Another important aspect revealed by the figure is that the majority of the faculty is younger professionals, i.e. lecturers (56 per cent of the total full-time teachers). Among the part-time teaching staff, the Professor category (i.e. the most senior faculty) dominates. It seems that this faculty configuration of full-timers and part-timers and different hierarchical positions make financial and management sense.

The teaching learning transactions in about 16-20 private universities are rated to be satisfactory (8). The teacher-student ratio (around 1:22) is favorable, and there are good physical facilities, computer (Internet) access and close academic supervision – all these indicators attract these private universities. Both the faculty and the students are academically oriented – a highly distinctive feature when compared with the politically-charged situation in any public (mainly general) university. There is no session-jam; the courses and their assessments are completed

according to the academic calendar and on time. But, we should note that the majority (i.e. about 66 per cent) of the total private universities do not meet the critical minimum requirements of physical and human resources (e.g. faculty, their mix).

### **Faculty selection method**

The faculty selection method of private university is satisfactory even though there are a large number of criticisms of this sector. The teachers' recruitment and selection procedure of the private university sector is fairer and acceptable than the public universities of Bangladesh. In most of the private universities of Bangladesh there is no political biasness, financial transaction in teacher's recruitment. In top ranking private universities, the requirements for appointing a teacher is very praiseworthy ; and even feign exposure is mandatory is most of the recruitment. The top graded students of different public universities are teaching in the private universities of the country, with very few exceptions. That's why; our respondent students, guardians, teachers and staffs are satisfied to the faculty selection method of the private university sector. But, the educationists are dissatisfied on this criterion considering the bad practice of some of the lower graded private universities of the country.

### **Faculty motivation level**

In leading private universities like, North South University, East West university, Independent University , AIUB, Brac University, etc, teachers are highly paid. Their compensation package is more handsome even than the last pay scale for public university's teachers. The teachers of these private universities are normally satisfied. They dedicated and devoted to the universities and students. On the other hand, the scenario is different in rest of the private universities. There is no service rule and pay scale in some these universities; and that's why; their salary structure and other benefits is very poor. That's why; teachers are not satisfied as their earning is not enough to bear their family expenses. As a result, teachers' turnover rate is high. As turnover rate is high, sometimes, teachers switch the job even in the middle of the semester. Students suffer a lot as they cannot adjust with a new faculty member in the same course in the same semester. The students are deprived from the teaching of a quality teacher. This is a big obstacle in providing quality education.

### **Teaching Technique**

The respondent students, their guardians; and teachers and admin staffs of private universities are in a satisfactory position regarding teaching techniques applied by the teachers of private universities. Around 46% teachers of private universities use multimedia projector in the class (2). Lecture method, case study method , group discussion, sudden tests , MCQ test, written examination, conceptual question answering is followed by the teachers to attract students in the class. But, the educationist is not satisfied to this factor comparing those of public universities and foreign universities.

### **Lecturer method**

In terms of teaching methods, the students are moderately happy to the methods are used. The students generally find the methods quite engaging but they feel that teachers need to update their contents regularly. In many private universities, teachers allow the students to speak in Bengali

where their medium of instruction is completely English. 64% of our respondent guardians are dissatisfied to this matter where the respondent students and teachers are happy to this determinant as the students like to speak in mother language. But, the admin officers and educationists are dissatisfied to the lecture method and they said medium of lecturer must be in English.

### **Curriculum**

In terms of the processing of students, all private universities have adopted the American course and semester/term systems and the continuous system of evaluation by course teachers resulting in letter grades and GPA. The curriculum is also drawn up according to what is followed by American universities. Some private universities have included some courses on Islamic knowledge and practices as may be found in Arab countries, with their courses followed by American universities.

All private university design their curriculum following the American universities, more specifically, business schools imitated the curriculum of IBA, Dhaka University, science and IT relegated programs follow the syllabus of BUET. So, there is no question regarding the standard of syllabus mentioned in the catalog of the university, but, the problem is the syllabus mentioned in the course outline and followed by the teachers and /or chapters, topic covered in a semester in proper techniques with effective learning of the students.

### **Scope of selecting diversified subjects**

These universities are yet to get general recognition for the education being imparted, although many degree colleges and some university colleges have been in place for a long time in the private sector. Newness aside, private universities are not offering courses in natural sciences such as physics, chemistry and biology, etc., and most other courses in the social sciences. Excepting few universities, all of them began offering courses in business administration and computer science in view of the potential demand for those programs.

From the experiences, it is evident that students want to study primarily those courses which more or less guarantee them better jobs. Therefore in almost all private universities Business School has the largest enrolment followed by ICT related subjects. Very few universities offer degrees in subjects that are socially desirable like Philosophy, Sociology, Bengali etc. Among 105 private university of Bangladesh, AUB firstly offered some less profitable degrees, like; Bangla, Sociology, Government and Politics, Islamic History, Islamic Studies and other subjects of social science and arts discipline.

### **Campus Discipline & Security system**

The respondent educationists and guardians are not satisfied to the academic environment and security system of private universities. Most of the universities, mainly newly established, are operating their academic activities in rented building in the city which are not well designed, well furnished or with full of security. There is no ample open space or play ground in the campus that is an obstacle for students' mental growth. Interestingly, some students prefer such narrow spaces for smoking or sexual mal practices behind the scene. Guardians are very conscious regarding sexual security of the female students as the boys of this age are very unruly. Respondent students have no

headache to this criterion where the teachers and staffs are satisfied to this matter, as per our expectation, to avoid their limitations.

### **Education cost**

As most the students of private university come from relatively solvent family, the guardians and students have no complain regarding tuition fees of these universities; and the teachers and administrative officers are satisfied to this determinant from the consideration of their own interest. But, the tuition fees of top ranking private universities are very high and beyond to the ability of the middle and higher middle class. As a result, a large number of meritorious students are deprived from the higher education. Many people think that private universities are only for the rich people of the society. There should be a similarity of the tuition fees among the private universities themselves and the public universities of the country; and they should revise their fees structure considering the economic condition of the country to make the higher education affordable to all.

### **Examinations system**

All private universities have introduced term/semester systems to offer courses of certain credit hours by US standards. For example, the BBA program requires the completion of at least 40 courses of 120 credit hours. Unlike in public universities, students are given the flexibility to take courses according to their abilities. That is, a student may be allowed to take two courses to remain in the program when a full load may be five or six courses(3). This has allowed many students with poor performance to continue in the program for a longer period. There are also allegations of grade inflation in some of the weaker private universities. This is expected because during the initial years many private universities admitted students without sufficient testing. Excepting top ranking private universities, the practice may still be going on in other private universities (3).

As it was seen in the curriculum of the other universities, the examinations are largely memorization based. This seems to be a critical problem in the majority of the universities of Bangladesh. Students have hardly faced any case based examinations. They largely characterize the educational system as monotonous, lacking modern teaching systems. There were some minor instances, where the faculties adopted innovative teaching instruments and were viewed positively by the students (2). The teachers and staff have no complain regarding the evaluation and marking system of answer scripts in private universities. But the respondent guardians, students and educationists are dissatisfied to this criterion of the private university sector for giving short suggestions before examination, poor standard of question paper, tendency to giving and getting high marks and grade without proper learning, no provision for evaluating answer scripts by 2<sup>nd</sup> or 3<sup>rd</sup> examiners for making final results etc.

### **Emphasis on moral upliftment**

As the religious and moral values are not seriously practiced in most of the private universities, the students, from cross cultured family, spoil the varsity environment that is a great concern for the guardians of the simple Bangladeshi family(6). Students are not in a position to understand the moral upliftment; and that's why they are delighted to this issue. The teachers and staffs are moderated to this criterion where our respondent educationists are dissatisfied for absence of moral education and practice in most of the private university of the country.

### **Students' socialization**

Some people said that private university students are self-centered; they do not have social commitments or higher motivation outside their worldly-wise pursuit of knowledge. This is not correct. They have their own sense of social responsibilities (6). People pay taxes and from their money the government subsidizes education of the students of public universities. But an overwhelming number of students now study in private universities who as the same taxpayers' children also deserve an equal share of the government's education grants, subsidies, scholarships and other facilities even though our respondent educationists and staffs think that the students of this sector are departed from our society. The students do not have any idea on socio economic and political issues of Bangladesh. They are addicted to facebook, viber, whats' apps and other unproductive sites of the virtual world.

### **Management and administrative efficiency**

Organization of the higher education sub-sector in Bangladesh takes into account this reality of the emerging private sector. The Ministry of Education (MoE) is the apex policy-making body in Bangladesh. The University Grants Commission (UGC) is the main administrative agency headed by a Chairperson (with some members) to regulate and co-ordinate plans and programs of different public and private universities (1). In most of the private university, with some exceptions, there is no Syndicate, Academic Council, and Board of Trustees to operate the academic and administrative activities of the universities effectively and systematically. Some unqualified peoples are in the vital positions in some weaker universities that is a great obstacle for efficient management(1). A single person is holding 5 /6 vital positions of the poor graded universities who cannot provide any service to the students or university (6). The respondent educationists are highly dissatisfied to the inefficient management and administration of the lower graded private universities. Other respondent groups are satisfied to the private universities on this criterion.

### **Extracurricular activities**

Our respondent guardians, teachers and admin staffs are satisfied to extracurricular activities of private university where the student and educationists are highly dissatisfied for inadequate opportunities of debate, sports, indoor games and other co-curricular activities. They are bored to monotonous classes, lot of class tests, midterm, final examinations, assignments, projects etc. Lack of ample extra-curricular activities, some of the students become introvert and involve to various fundamentalist groups.

### **Infrastructure and facilities**

In most of the private universities, there is a lack of well furnished and adequate call rooms, multimedia projector, accommodation, play grounds, internet facilities, library facilities, research facilities, except those universities who have already been shifted to their permanent campuses. In most of these universities, administrative procedure is very complex. There is a complexity in registration and payment of tuition fees. There is also a crisis of transportation for the teachers and students in most of the private universities.

The general physical condition of classrooms, libraries, and computer centers is much better in private universities those have been sifted to their permanent campus. Most of the facilities are air-conditioned and fitted with audiovisual equipment. Multimedia is used by some of the teachers

trained abroad. NSU and a few others began developing a library and a computer laboratory right from the beginning. NSU has a strong collection of foreign journals in its library. The administration of low ranking universities has taken steps recently to create a digital library which will greatly enhance the learning opportunity and thus the perception of the students about the library.

### **Research facility**

Private universities are blamed for not doing adequate research though research is an integral part for the career development of the faculty members in the university level. Most private universities are reluctant to do research which appears to be a major hurdle facing students in acquiring proper learning. Eleven private universities did not spend a single penny on research projects in 2016(1). Things have not changed so far. According to the Private University Act 2010, institutions are bound to spend a major portion of their budget on research. The University Grants Commission hopes that for the sake of improving the quality of higher education and national development private universities will carry out research work. The rest of the 41 universities spent a total of Tk 91,52,684 for carrying out research work in 2016(1). On average universities spent Tk 6,320,797 in 2016(1).

When it comes to the subject of research, students tend to have a more positive perception. When we asked whether the curriculum focuses on research methods, 70% tended to strongly agree, leading to the conclusion that private universities is more intent on research instead of a memorization-based approach when it comes to imparting knowledge. Students have this perception for their limitation of understanding about research

### **Assignments & Reports**

The assignment and reports offered in the curriculum were theoretical and lacked the practical perspective. Students seldom recall participating in field work to obtain data, under research and analysis of data to compete the course requirements (6). Over the years, this has led to lower practical skills of the graduates. Despite the cooperation and feedback from the faculties, a theoretical based report system is unlikely to benefit the students (6).

### **International Affiliation**

Our respondent students, their guardians, teachers, staffs and educationists are satisfied to international affiliation of the private universities. Most of the private universities have affiliation to some top ranking universities of North America, Canada and Europe. The students of this industry have an intension as well as scope to go abroad for a foreign exposure in Masters' and PhD level. Moreover, students are actively involved in exchange programs and participation in international events and programs.

### **University Funding**

The mission of most of the private universities is to provide tertiary education at reasonable cost(1) Thus, it offers wide array of financial aid to its students such as:

- **Merit Based Aid:** Granting of financial aid to deserving students on a need-cum-merit basis.
- **Family Concession:** When two siblings (brother/sister with the same parents) study simultaneously in the same university, the second sibling is entitled to a half-tuition waiver.



### Career opportunity

The university has lacking in the alumni network and an effective placement office. These two play a vital role in ensuring proper link with the corporate world and job opportunity for the new graduates (2). As the survey reveals, our selected private universities are poorly placed in both these aspects. The authority has decided to strengthen the alumni network, but no such benefits have been yet realized by the students.

In addition, students believe that the lack of a strong alumni network is often the root cause of problems in securing jobs. Respondents point out that in places, fresh graduates meet their alumni during interviews or in jobs and this works favorably on their part in landing those jobs because of known faces. However, since the alumni network in private universities is weak, securing jobs becomes harder – even more so considering the inefficacy of the placement office (3).

### 10. Top Ten private universities of Bangladesh

We asked our respondent students, their guardians, teachers and admin staffs of selected 10 private universities, and famous educationists of our country for marking our selected 30 universities (10 of our sample universities and 20 other 1<sup>st</sup> graded private universities based on their establishment period, number of students, facilities, quality of education, peoples' perception in general) on our predetermined 21 criteria separately out of 10. Then, we calculated the mean of the total marks were given by the 500 respondents on 21 criteria for every universities and then converted the average marks into hundred for each universities and renamed this marks (out of hundred) as Rating Points and make the list of Top ten private universities as per their rating points.

**Table 3: Top Ten private universities' ranking**

Position	Name	Rating Pts	Distinctive Competencies
<b>First</b>	North South University	77(76.4)	Strong brand reputation, offering time demanded world class under graduate, graduate and post graduate degrees, high profile teachers
<b>Second</b>	Brac University	74	Very rich research personnel and works
<b>Third</b>	East West University	74(73.5)	N/A
<b>Fourth</b>	Independent University	73(72.8)	N/A
<b>Fifth</b>	American International University Bangladesh	71	N/A
<b>Sixth</b>	Ahsan Ullah University of Science & Technology	65	Very rich Science Faculty
<b>Seventh</b>	Asian University of Bangladesh	63	Lowest education cost with satisfactory quality
<b>Eighth</b>	International University of Business Agriculture & Technology(IUBAT)	61	Enormous transportation facility for the students of Dhaka and surrounding districts
<b>Ninth</b>	BGMEA University of Fashion & Technology	60(59.3)	Offering various RMG job oriented under graduate, graduate and diploma degrees
<b>Tenth</b>	University of Liberal Arts Bangladesh	59(58.7)	N/A

Source: Survey result-2018

This list has been prepared from a survey was conducted only on 500 samples. Only 500 respondents' answer does not represent the 17 Cores peoples' perception on this very sensitive issue. This survey result can give only an idea regarding the best performing private universities of Bangladesh, but, this list cannot be given as example or reference in any professional research.

## **11. Recommendations and suggestions**

Firstly, there lies a tradition that private university students are good in English but poor in Bengali whereas public university students are good in Bengali but poor in English which should be changed and they must be good both in English and Bengali. As 40 per cent English-medium students find their place in private universities, things have come to this sight (2). Both the groups are the future leaders and assets of the country and so they should be trained and developed to face the growing challenges of the years to come.

Secondly, still eighty-five percent students of Bangladesh don't receive university education (3). So, we should try to open the doors of higher education for more and more students without compromising the quality. When we would be able to ensure real quality education, it can be a good source of income for us as the students from neighboring countries will come to get higher education here. To keep this point in mind the government may think of establishing a separate body like University Grants Commission to ensure research and quality of higher education in private universities. Definitely, it must not be an agency of bossing or controlling or centre of education policies. It will be a world-class organization to enhance research and quality of higher education in the private universities.

Thirdly, most universities are market-driven and tuition-driven. By implication, the private universities offer only those degree programs which they can sell in the market at high prices i.e. charging high tuition and other fees including Campus Development Fees (6). Since no private universities get any financial supports from the government, they raise all the funds necessary to operate, maintain, develop and expand the university from the students (4). Of necessity, they need to generate large surpluses to build campuses. In a sense, these universities require the current generation (students) to subsidize the education of future generation (students) who will attend classes in the buildings/class rooms to be built in future with tuition money of present generation (students) because part of the surpluses generated currently is used to buy and develop land on which campus buildings are to be constructed. Since tuition and fees are the only sources of revenues the sustainability of a private university is the function of how carefully the academic programs offered are selected, and how the tuition structures are designed.

Fourthly, the best way to know the standard of education of any university is to collect the reactions of and feedback from its alumni. For obvious reasons some universities, specially the private universities do not show much interest in alumni associations, even though UGC has stressed upon its formation. The ex-students have got the natural advantage and scope of expressing the truth. Being no longer students they are absolutely free to opine about their former teachers, administration and their teaching methods. Also, being in practical field they are aware how much they suffer for getting jobs or admissions. The expression of their experiences may be taken as the

true and neutral picture of education in their ex-universities. Incorporating their suggestions by the concerned universities can be seen as the best means of improving the standard (2).

Instead of mere suggesting the universities to form alumni associations, the UGC may go one step ahead. They may ask the universities to deposit alumni fees (on the basis of number of passing out students) with a bank account of the UGC. The alumni associations of various universities may be asked to meet at least twice a year in conferences and prepare their observations and recommendations. The UGC may hand proportionate amount of fees after getting their reactions and recommendations. Then the commission may publish their findings and ask the concerned universities to take remedial steps.

Finally, improving the quality of higher education is a difficult job, much difficult than what a teacher of a US university may think. It needs serious and well-thought-out steps for finding out the root cause of deficiencies and then suggesting remedial measures. In conclusion, we wish to summarize the problems mentioned above and the suggestions thereof.

i) The quality of education in any university depends directly upon the quality of the teachers and condition of appointment. Thus, only those with best academic records should be appointed on attractive conditions as teachers.

ii) The quality of education in any university depends upon the academic performances of the students seeking admission. So, endeavor should be made for taking superior quality students, especially in Engineering and Science subjects. Universities may put bar on students using coaching centers.

iii) Superior curriculum of courses is important, but more important is the method of execution. The universities generally prepare good quality curriculum, but endeavor should be made to monitor how those are being executed.

iv) The coaching centers enable inferior quality students to achieve superior grades. They also produce students who are reluctant to work hard for gathering knowledge. Therefore, all coaching centers should be closed immediately for the sake of improvement of the quality of higher education in the private universities of Bangladesh.

v) It is difficult to know what problems or opportunities the ex-students of various universities are having in the job market, professional jobs, admission to higher education etc. Thus the efficient way to collect the reactions of the alumni should be found out.

## 12. Conclusion

The idea of common people to study at private universities means a lot of money. But many universities take tuition fees considering low-income families. Some private universities have complaints about education, but most private universities are trying their best to teach quality standards, which are considered positive. We hope that the universities who have complaints in the name of the university will also be aware of this. Many complaints have been heard occasionally on the private universities of the country. UGC, Ministry of Education and Government policymakers should be more stringent about the alleged universities. Form source of information at University

Grants Commission `cautioned students against enrolment at private universities having illegal outer campuses and disputed ownership and running on court orders after being disapproved by the commission. The commission should publish advertisements in dailies cautioning students and guardians not to get enrolled in the troubled universities, issued the notice so that no students are cheated by enrolling at these universities.

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