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## A COMPREHENSIVE STUDY ON DIGITAL BANKING AND ITS IMPLICATION IN INDIAN BANKING SECTOR

## GOURAB DAS ASST. PROFESSOR DEPARTMENT OF COMMERCE VIDYANAGAR COLLEGE SOUTH 24 PARGANAS

#### ABSTRACT

Financial sector is one of the main pillars of economic growth of a country and Banks are considered the most important part of it. Economic growth & development of any country is influenced by the development of the banking sector. Digital banking may be known as adoption of various emerging and useful technologies by the banks to provide solutions to bankers for their short term and long term business and technological requirements. In the present condition of market, factors like enhancing of customer satisfaction, unified customer experiences, faster output, infinite banking volumes, financial inclusion, operational efficiencies, scale of economy etc. are being sought by using digital banking technologies. This study is based on secondary data and found digital banking is having enormous potential to change the landscape of accelerating the integration of unbanked economy to the mainstream. the businesses are able to save a lot of time on the manual processes and this has a great impact on their productivity, which leads to economic development in India.

#### **KEYWORDS**

Digital, Economy, Mobile banking, services.

## **JEL CODES** G21, O32.

#### INTRODUCTION

Financial sector is one of the main pillars of economic growth of a country and Banks are considered the most important part of it. Economic growth & development of any country is influenced by the development of the banking sector. In this era of technology demand of financial services is increasing at a faster rate. To attract more customers and retain the customer base banks, have to advanced their technology and adopt the latest technology to enhance customer experiences. The impact of globalization of Indian banking industry could noticed from past few years. Now, Digitalization is not an option for the banking industry, rather it is mandatory. The buzzword in India now a day is creating a cashless economy.

The process of converting data into digital format adopting latest technology is known as digitalization. It reduces errors and help customer loyalty. All the banks digitalised themselves to maintain a competitive advantage and offer the maximum satisfaction to their customers. Digitalization of banking requires some definite platforms like Unified Payment Interface (UPI), Phone Pay, Debit Cards and Immediate Payment Service (IMPS).

Digital banking may be known as adoption of various emerging and useful technologies by the banks to provide solutions to bankers for their short term and long term business and technological requirements. In the present condition of market, factors like enhancing of customer satisfaction, unified customer experiences, faster output, infinite banking volumes, financial inclusion, operational efficiencies, scale of economy etc. are being sought by using digital banking technologies. Digital Banking is the part of government of India's flagship Programme "The digital India" with a vision to convert India into a digitally empowered country. Faceless, paperless, cashless is the basic need of India government now days. On the other side Registration, Invoicing, Payment selection, Payment confirmation are the important phases of digital payment system introduced by the banks.

Digital banking services can develop in the Indian economy as well. Approximately 30 to 35 percent population of India are using digital banking services, and the remaining population is still learning banking services. The Government of India coming out with new initiations to motivate the digital India program and also should definitely take some measures like waive off the charges and taxes pertaining to digital transactions certain period and control of the cyber crimes, outline fraud, hacking by connectivity and data protection, then the transactions will aggressively grow and people will be addicted to digital transactions; there will be less demand for cash and it will lead to more deposits in the banking system. The funds accumulated the banks can be used for development, and it leads the country's economy.

#### **REVIEW OF LITERATURE**

- Shettat (2018) focuses that, digital banking is having enormous potential to change the landscape of financial inclusion. They also found that, with the features as low cost, easy use digital banking can accelerate the integration of unbanked economy to the mainstream.
- Hasan (2002) found that, to attract the customers the bank has emerged in a significant strategy that is online banking.
- Santiago Carbo Valverde (2017) attempted to discuss the impact of digitalization on banking activities and challenges that imposes for financial stability. They also found that, digitalization is an opportunity to reduce marginal costs and increase productivity in financial services.
- Jagtap (2018) analysed that with the help of digitalization Indian banks are now not only getting more customers but also delivering top-notch services, as efficiency counts as well.
- Hema Divya and Suma Vally (2018) focused on their analysis of the adoption level of the digital payment systems by customers and also found the deployment of technology for digital payments have improved the performance of banking sector and able to achieve the motive cash less country.
- Rahul Golden S. (2017) explained that banks always try to adopt latest technologies to enhance customer experience. He further explained that due to the adoption of this digitalization, the banking sectors in India face some remarkable changes as well as hurdles.
- Rao et.al. (2003) explained with his theoretical analysis of internet banking in India and also compared to abroad bank and found that there is still have a long way to go for the Indian bank for offering online service and to reach at a critical mass there are sufficient infrastructure in place and also sufficient number of users.

## **OBJECTIVES OF THE STUDY**

The primary objectives of the study are -

- 1. To understand the concept of Digital Banking.
- 2. To identify the growth of digital banking.
- 3. To identify the impact of digital banking in Indian banking sector.

#### **RESEARCH METHODOLOGY**

The paper performs an extensive research on the basis of the data and information obtained from secondary sources. It involves the use of journal, research paper, and various reports of RBI and authenticate bank website and online resources etc. for the collection of secondary data needed in the analysis.

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### ADVANTAGES OF DIGITAL BANKING

- Digital Banking has a great influence in today's economy throughout the world. The advantages of digital banking are as follows:
- Transparency and Accountability: It is very easy to track all the transaction and easily all the cash inflow and outflow can be noticed through digital banking. Transferring of money becomes faster and safer.
- Minimization of operating Cost: Digital banking reduces operating cost of a bank. It allows banks provide higher interest rate for deposits and reduces its
  day to day transaction cost of the banks. Again machines can perform faster and cheaply in compare to human. Low operating cost helps the banks earn
  more profit which ultimately help for the economic development.
- **24X7 Availability:** People are very busy now. After the recent development of telecommunication industry every people are ready with their smart phone. They need everything anytime anywhere. Through digital banking system customer can check their banking records and can do transaction whenever they want. Banking service are available round the clock to a customer.
- Banks in village: previously rural people are not every close to banking system. But through the digital banking system and the spread of ATM, Net banking and other facilities people of villages can access banks very easily. Every the branches of banks in rural area are increasing day by day as core banking solution system enable banks to control all the branches centrally.
- Reduced bureaucracy and corruption: through non cash transaction, electronic transaction, and electronic exchange and through vigilance and tracking help people to reduced bureaucracy and corruption and this is making possible only due the advancement of digital banking.
- Other advantages: There are superior and advance technologies that are convenient for banks and customers to get great services just by getting into the system. The services are financial planning, budget preparation, and predictive tools, credit calculators, investment analysis and stock trading even most banks offer opportunities for online tax forms and tax preparation.

#### **DISADVANTAGES OF DIGITAL BANKING**

Like after day there will be night, some way besides a lot of advantages of digital banking there are some disadvantages of digital banking too. These are:

- Security of personal information: In digital banking system personal information can be theft like password, card no etc using internet as people are widely
  used debit card, credit card and other modes of digital transaction. So cyber crime has increased.
- Internet problems: Poor internet facilities, low internet speed, OTP, PoS problems, are some of the obstacle of digital banking.
- No immediate solution: if any error occurs there will be any immediate face to face solution in the digital banking mechanism.
- Problems of rural area: In rural areas poor internet connectivity and poor telecommunications signals people are not enjoying the usefulness in digital operations of bank.

## **DIGITAL BANKING TRENDS IN INDIA**

Digital India in the banking sector has grown sharply in recent times. Some trends in digital banking in India are:

- Increase in Customers: Indian government encouragement to use paperless transaction has contributed much to people adopting the use of technology for their financial transactions. There is a significant increase in the use of plastic money and the trend will continue.
- Merge Physical and Digital Process: Banks today offer a mixed physical and digital process to their customers. The customers could walk into the bank and then use devices there to carry out their transactions e.g. in SBI a customer wants to deposit cash have to walk and through the green card system can deposit his money. In the Rural Indian context, this could certainly see a steady increase in this kind of service.
- Mobile Technology: Now mobile phone is available to everyone and data and very much cheap. The mobile app based technology is launched by the different banks though which customer and maintain his account, doing any transaction whenever and wherever they want. This trend will only continue.
- End to End Digital Banking in India: This is one of the systems to provide all kinds of services over the internet resulting in paperless transactions. Now the customer do not have to come to the branch itself through internet they can make communication with the bank and maintain their account.

#### IMPACT OF DIGITAL BANKING ON INDIAN ECONOMY

In India, banks uses and upgrade the latest technology to survive and grow in the present market condition. The Indian government is strongly pushing for digital operation. They need a paperless currency. They launched The United Payments Interface (UPI), Bharat Interface for Money (BHIM) etc. to move forward their Digital India programme. These are working with Aadhar based mobile payment system and linked to the customer's bank account. Today banks aim to provide fast, accurate and quality banking experience to their customers. Now a day the top most priority for all the banks in India is digitalization. As part of encouraging cashless transactions and transforming India into less cash society, various modes of digital payments are available and Indian Govt take a lot of initiatives to accelerate this situation. Digital banking promotes financial inclusion through the introduction of banking services within the scope of financial services. Through digital transactions, a lot of money is put in and the government can use the means of economic development.

SI No	1980-1990	1991-2000	2001-2010	2010-2019
1	MICR Standard	ATMs	IMPS RTGS	Bio Metrics
2	Cheque Endorsement	Electronic Funds Transfer Computerization	NEFT NECS	Mobile Banking
3		Branch Connectivity		
4			Online Banking	Cheque Truncation UPI USSD
5			Tele Banking	E-Wallet

#### Source: Internet Data

As part of encouraging cashless transactions transforming India into less cash society, various modes of digital payments are available.

- Debit/Credit Card: This is the plastic card Suitable for online/offline merchant sale. Transaction limit set by card issuer i.e. different banks. Card number details and PIN required.
- RTGS/NEFT: This online system Suitable for high value online transactions i.e. Transaction limits minimum 2 Lakh to no upper limit. Account number, password, beneficiary registration, IFSC code are required.
- Immediate Payment Service (IMPS): this is the process of instant transfer of money. There is transaction limits which is up to 2 Lakh per day. Account
  number, password, beneficiary registration, IFSC code are required.
- Unified Payment Interface (UPI): this is another way of instant money transfer. Transaction limits is up to 1 Lakh. Virtual payment ID (VPA) of recipient is
  required.
- Unstructured Supplementary Service Data (USSD): This system is the transaction facility include as feature in phones without internet connectivity. Aadhar number, IFSC or code allotted by banks on registration is required.
- E-Wallet: For small ticket transactions this system is used. Transaction limits is 20,000 per month (1 Lakh for KYC compliant wallet holders. Login ID is required.

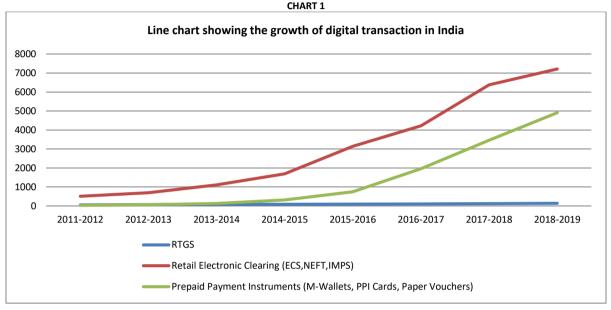
#### ISSN 2231-4245

## CURRENT STATUS IN THE DIGITAL BANKING

## TABLE 2: VOLUME OF TRANSACTION IN DIGITAL BANKING (VOLUME IN MILLIONS)

Year	RTGS	Retail Electronic Clearing (ECS,NEFT,IMPS)	Prepaid Payment Instruments (M-Wallets, PPI Cards, Paper Vouchers)		
2011-2012	55.1	512.4	30.6		
2012-2013	68.5	694.1	66.9		
2013-2014	81.1	1108.3	133.6		
2014-2015	92.8	1687.4	314.5		
2015-2016	98.4	3141.5	748.8		
2016-2017	107.8	4222.9	1963.7		
2017-2018	124.4	6382.4	3459.0		
2018-2019	142.8	7212.6	4912.2		
Source: RBI bulletin.					



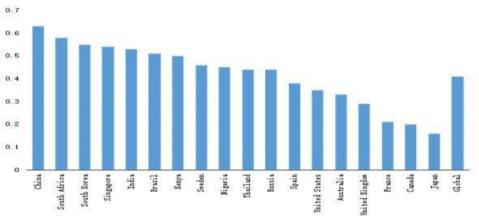


#### TABLE 3: DIGITAL LITERACY GROWTH IN INDIA [Number of users in million]

	2018	2019		
Active internet users	462	627		
Active mobile internet users	430.3	587		
Active social media users	250	560		
Active mobile social media users	230	457		
Source: Internet Data				

Source: Internet Data

CHART 2: PICTURE: GLOBALLY ADOPTION OF MOBILE BANKING IN DIFFERENT COUNTRY



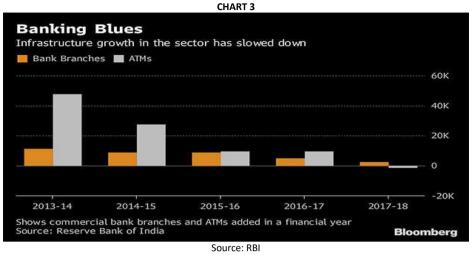
Source: Internet

Indian government is aggressively promoting digital transactions. The launch of UPI & BHIM introduced by NCPI is significant steps for innovation in the digital banking progress. UPI is a mobile app where people can make fund transfer immediately to any other bank account. Today banks aim to provide fast, accurate and quality banking experience to their customers. Now a day, the top most agenda for all the banks in India is digitalization. Online banking has changed the face of banking and brought about a noteworthy transformation in the banking operations. From table 2 it can be stated that various modes of digital banking has increased day by day. From the year 2015-2016 the journey reached a milestone. Table 3 it is clear that digital literacy among India people increased with a massive number. So digital banking is one of the main important parts of people's life now days.

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## **DIGITAL BANKING IN RURAL AREAS**

Banking in rural area is one of the main challenges in India. After digitalization number of banks in rural area has increased. ATM facility are available in all the villages are now a days. But till date there are some problems of internet facility so that banks could not facilitate electronic transaction from the branch itself but after the revolution of telecommunication smart phone users even in rural area reached a massive number. So using mobile banking model banks are giving all kind of facility to its user even in rural area satisfactorily. the following data shows that growth of bank branches and ATM has slowed down after successful implementation of digital banking in rural areas.



#### **FINDINGS OF THE STUDY**

- Anytime and anywhere banking system help the banks to increase their customer satisfaction as a result bank has increased their customer base.
- Digital banking system helps and makes a safe way to handle financial transactions. As all the records are maintained electronically fraud, corruption and
  financial crime can be controlled to some extent.
- Digital banking system reduced the cost of banks. So the banks can make more profit.
- Digital banking is having enormous potential to change the landscape of financial inclusion. Easy use of digital banking can accelerate the integration of unbanked economy to the mainstream.
- Reserve Bank of India removed the payment of RTGS or NEFT for promoting digital banking.

#### SUGGESTIONS

- Technical difficulties should be minimised and more expert human resource should be deployed to avoid loss of data.
- Customer awareness programme should be organised for the proper utilization of digital banking system specially those who are digital illiterate.
- Banks must be very careful cyber threats. Proper security should be provided to the customer for this security.
- Different new regulations should be implemented for the promoting of digital banking in Indian economic environment.
- Customer must get proper web-help from the bank website to maintain their banking system as well as banking transaction 24X7 hours.
- Proper care should be taken in case of rural branches and facilities regarding digital banking providing to rural customer.

#### CONCLUSION

The banking environment in India is changing. A new era of technology is revolutionizing the way customers interact with their finances. Banks are reconsidering their way of doing business to offer a better customer experience and remain competitive giving different facilities through digital banking. By looking at the scenario of existing India, one can find that People are now taking more and more advantage of the digitalization in case of banking. Traditionally, banking practice use to focus on push the product rather than satisfying customer but in recent times banks are very keen about their customer satisfaction. Increasing use of smart phone, internet, help the banks to digitalise themselves and increase the customer base. Through digitalisations banks are able to reduces human error and enhance customer satisfaction. With the help of digital banking, businesses do not have to depend on the bank operation timings. Now the transactions can be made in 24X7 hours. Transactions like paying bills or making regular payments that can be automated in the digital banking platform. As a result, the businesses are able to save a lot of time on the manual processes and this has a great impact on their productivity, which leads to economic development in India.

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# TESTING THE ASYMMETRIC VOLATILITY IN THE EMERGING MARKET: E-GARCH MODEL OF THE INDONESIAN BOND MARKET

## MIVTHAHUL RAHMA STUDENT SCHOOL OF BUSINESS BOGOR AGRICULTURAL INSTITUTE BOGOR, INDONESIA

## NOER AZAM ACHSANI LECTURER DEPARTMENT OF ECONOMICS FACULTY OF ECONOMIC & MANAGEMENT BOGOR AGRICULTURAL INSTITUTE BOGOR, INDONESIA

## TONY IRAWAN LECTURER SCHOOL OF BUSINESS BOGOR AGRICULTURAL INSTITUTE BOGOR, INDONESIA

#### ABSTRACT

High composition of government bond to total government debt could be seen as an Indonesian government's strategy in obtaining sources of financing with favorable payment scheme. Currently, for about 91% of government bond is being tradable in secondary market. Yet, the increment of tradable bond ownership by foreigners is like two side of coin. It could be beneficially or potentially harmful to Indonesia capital market volatility. This study aims to identify asymmetric return volatility in the Indonesian government bond using E-GARCH model. The results show that the longer maturities bond, the higher its ordo, either in conventional or Islamic bond traded domestically. Besides, the longer maturities conventional bond, increasingly found no asymmetric volatility. Meanwhile for Islamic bond series, found no asymmetric return volatility neither on short, medium nor long term maturities. Moreover, it also found high risk yet low returns on conventional and Islamic bond series which compared based on maturities. Yet, high risk high return applies when comparing between conventional and Islamic bond series. In addition, this study also to identify asymmetric return volatility in the Indonesian government bond traded internationally as further comparison.

#### **KEYWORDS**

E-GARCH, asymmetric volatility, Indonesian government bond.

### JEL CODES

C22, G11.

## **1. INTRODUCTION**

earning from 1998 financial crisis hit Indonesian capital market where huge amount of capital flow out of the market causing illiquidity, bond market was developed since then. Issuing government bond can be said as strategy in exploring sources of financing internally and externally in form of favorable payment scheme. Currently, according data issued by Directorate General of Financing and Risk Management Indonesia, as much 2.733 trillion Indonesia government bonds has been issued to cover deficit in state budget and more than 91% is being tradable in secondary market. Many years goes by, foreign ownership in Indonesia government bond reach 38.09% until now, where most of it on the long-term bond series. Ervina (2014) stated volatility increase with foreign ownership in Indonesia government bond. In addition, for Indonesia government bond traded internationally, an excess of liquidity in international market and an attractive bond return, make it more saleable. This condition should be wary since recovery US economy encourage interest rate hike which can reverse the situation. Instead of incur lower cost of fund, potential risk even lurks.

Volatility measures the magnitude percentage changes either price or return on securities during period observed. Volatility could be either symmetric or asymmetric, yet in financial data hardly found symmetric but asymmetric volatility. Asymmetric volatility explains by Engle and Ng (1993) as negative shocks give more volatility than positive shock. This concept first noticed by Black (1976) and Christie (1982) with leverage effect theory as an explanation of its existence. Another theory called volatility feedback also explains how negative shocks move the market differently from positive shocks (Pindyck 1984 and Campbell and Hentschel 1992). The existence asymmetric volatility mostly can be found during market crashes as decreasing in asset market prices associated with increasing in market volatility (Wu 2001). Knowing the existence of asymmetric volatility can be useful for portfolio selection, risk management, hedging strategies and pricing of financial derivatives such as options and futures (oskooe and shamsavari 2011).

Many studies regarding volatility, asymmetric and its factors triggers have been conducted either in Indonesia or foreign countries, where most of them using stock as an object such as Ajireswara (2014), Cakan et al. (2015), Federova et al. (2014), Oseni and Nwosa (2011), Turnel and Weigel (1992), Kurniawan (2008), Wu (2001), Caporale et al (2014), Aggarwal et al. (1999), and Wulandari (2016). Some studies in foreign countries regarding volatility, asymmetric and its factors triggers were found with bond as an object which conducted by Goeij and Marquering (2006), Evans and Marshall (1998), Huang and Lu (2009), Chee and Fah (2013), and Viceira (2012), while less studies were found in Indonesia. Besides, they were focusing more on macroeconomic factors affecting Indonesia government bond such as conducted by Hariyani (2009), Asih (2013) and Ervina (2014).

The objectives of the study are to identify and analyze the existence of asymmetric volatility by comparing Conventional and Islamic of Indonesia government bond return which categorize based on denomination and maturities where they are traded domestically and internationally.

Main contribution of this study by focusing on Indonesia government bond return by comparing type, denomination and maturities of its series which traded domestically and internationally is to analyze series which can be found asymmetric volatility by using E-GARCH model, whether any series can be combined in order to minimize portfolio risk.

(1)

The result of this research could be useful for academicians who is interested to study further on bond market as well as econometrics in analyzing financial data. Moreover, this result could help investors or fund manager in optimizing portfolio allocation. In addition, it could be used as the government's discretion in making decision of bond issuance in terms of type, maturities, denomination and market target which contribute to stabilization in bond market.

The rest of the paper is organized as follows. In section 2 we explain the data and methodology. Section 3 gives empirical results and discuss about financial strategic implementation. Section 4 summarized the research finding and gives concluding remarks.

## 2. DATA AND METHODOLOGY

The data used in this research is daily bond series closing prices obtained from Bloomberg from period January 1<sup>st</sup>, 2013 to December 31<sup>st</sup>, 2015. Bond series which observed as shown on table 1:

TABLE 1: INDONESIA GOVERNMENT BOND SERIES OBSERVED						
Bond Series	Bond Type	Issuance Date	Maturity Date	Denomination	Market	
Conventional bond compared to Islamic bond in Rupiah denomination						
FR0042	Conventional	25-Jan-07	20 years	Rupiah	Domestic	
IFR0006	Islamic	1-Apr-10	20 years	Rupiah	Domestic	
Conventional bond compared based on maturities						
FR0055	Conventional	23-Sep-10	06 years	Rupiah	Domestic	
FR0031	Conventional	16-Jun-05	15 years	Rupiah	Domestic	
FR0057	Conventional	21-Apr-11	30 years	Rupiah	Domestic	
Conventional bond compared to Islamic bond in US Dollar denomination						
RI0521	Conventional	5-May-11	10 years	US Dollar	Global	
SNI22	Islamic	21-Nov-12	10 years	US Dollar	Global	
Islamic bond compared based on maturities						
IFR0005	Islamic	21-Jan-10	07 years	Rupiah	Domestic	
IFR0002	Islamic	26-Aug-08	10 years	Rupiah	Domestic	
IFR0006	Islamic	1-Apr-10	20 years	Rupiah	Domestic	
Islamic bond compared based on market and denomination						
IFR0002	Islamic	26-Aug-08	10 years	Rupiah	Domestic	
SNI22	Islamic	21-Nov-12	10 years	US Dollar	Global	
l in three steps. This study is to analyze asymmetric volatility on government hand return so the						

The data in table 1 is processed in three steps. This study is to analyze asymmetric volatility on government bond return, so the first step is to transform daily closing price into return. The common way to calculated return as follow:

$$r_{it} = ln \frac{CP_t}{CP_{t-1}}$$

Where CPt is closing price bond series at day t and CPt-1 is closing price bond series at day t-1. The next step is data processing through some test before constructing E-GARCH model. First test is stationarity. Times series data called stationary if mean and variance of its data does not move systematically over time. The null hypothesis is rejected when value of the t-ADF is smaller than critical value means the data stationary and can be used for the next step. Further, using correlogram autocorrelation (ACF) and partial correlation (PCF), best ARMA (autoregressive moving average) model could be looking for. An AR model is one where the current value of a variable y depends upon only the values that the variable took in previous periods plus an error term while MA model is simply a linear combination of white noise processes, so that y depends on the current and previous values of a white noise disturbance term (Brooks 2008). Hereinafter, best ARMA model will be tested first to see whether the ideal condition meet in order to have good estimate also known as blue (best linear unbiased and efficient) assumptions by testing its normality and autocorrelation. Normality is tested by observing probability value of Jarque-Bera to see whether the data distributed normally. Autocorrelation is found when the data is non stationary (Ekananda 2014). This will generate estimate coefficient consistent and unbiased, yet with greater variance causing inefficient estimates that tend to receive null hypothesis. Next test is ARCH LM test to determine whether the data can be processed further using ARCH/GARCH family. If the probability value of R-squared is smaller than the critical values, the null hypothesis is rejected means the ARCH effect exists then E-GARCH model can be constructed.

The E-GARCH model in this research refers to the model developed by nelson (1989) in Ajireswara 2014, which is shown in the equation 2 where the existence of asymmetric volatility is present if  $\gamma_r \neq 0$ :

$$\log(h_t) = \omega + \sum_{q=1}^{q} \beta_q \log(h_{t-1}) + \sum_{p=1}^{p} \alpha_p \left| \frac{\varepsilon_{t-p}}{\sqrt{h_{t-p}}} - \sqrt{2/\pi} \right| + \sum_{r=1}^{r} \gamma_r(\frac{\varepsilon_{t-r}}{\sqrt{h_{t-r}}})$$
(2)

In determining best model (p,q) by trial and error combination p (1,2,3) and q (1,2,3). Best model is chosen with akaike information criterion (AIC) and schwarz information criterion (SIC) the smallest. The p value indicates previous variance and q value indicates volatilities. The third step is analyzing return and risk calculated using standard deviation of bond series observed.

#### 3. RESULTS AND DISCUSSION

The E-GARCH output on Table 2 has passed ARCH-LM test which means the model chosen free from heteroscedastic or assumption homoscedastic fulfilled. Table 2 shows the estimation results for asymmetric volatility on conventional bond return represented by FR0042 compared to Islamic bond return represented by IFR0006 for Rupiah denomination which traded domestically. Ordo for both series show that current volatility tends to be affected by less recent (t-3) previous variance but differ with previous volatility in which FR0042 as affected by more recent (t-1) volatility, while IFR0006 is affected by (t-3) volatility.

Besides, Table 2 shows the estimation result for comparative asymmetric volatility return based on maturities for Rupiah denomination which traded domestically represented by FR0055 for short term bond, FR0031 for medium term bond and FR0057 for long term bond. Both ordo for FR0055 and FR0031 show that current volatility is affected by more recent (t-1) previous variance and less recent (t-3) previous volatility. On the other hands the longer bond maturities (FR0057), its current volatility is affected by less recent (t-3) previous variance and volatility.

The next estimation results for asymmetric volatility on conventional bond return represented by RI0521 compared to Islamic bond return represented by SNI22 for US Dollar denomination which traded internationally. Ordo for RI0521 shows that current volatility is affected either by more recent (t-2) previous variance or (t-1) volatility than ordo for SNI22 which affected by (t-3) previous variance and (t-2) volatility.

Moreover, Table 2 shows, the higher ordo found with the longer-term Islamic bond series where current volatility long term Islamic bond represented by IFR0006 is affected by less recent (t-3) previous variance and volatility while current volatility short and medium Islamic bond represented by IFR0005 and IFR0002 are affected by more recent (t-1) previous variance and volatility.

The last comparison between Islamic bond in Rupiah denomination traded domestically represented by IFR0002 and in US Dollar denomination traded internationally represented by SNI22 where current volatility IFR0002 is affected more recent (t-1) previous variance and volatility than SNI22 which affected by (t-3) previous variance and (t-2) volatility. From this comparison we can say for current volatility Islamic bond series traded domestically is more recent affected than Islamic bond series traded internationally.

			T BOND OBSERVE			
(,,,,)		Asymmetric Parameter				
(P,q)	ARCH Ellect	Coefficient	Probability			
Conventional bond compared to Islamic bond in Rupiah denomination						
(3,1)	None	-0.141666	0.0001			
(3,3)	None	0.134245	0.1515			
bond con	npared based o	n maturities				
(1,3)	None	-0.118892	0.0225			
(1,3)	None	-0.132803	0.0112			
(3,3)	None	-0.018820	0.4202			
Conventional bond compared to Islamic bond in US Dollar denomination						
(2,1)	None	-0.106669	0.0625			
(3,2)	None	-0.185245	0.0032			
compared	based on mat	urities				
(1,1)	None	0.040775	0.3975			
(1,1)	None	-0.088498	0.3186			
(3,3)	None	0.134245	0.1515			
Islamic bond compared based on market and denomination						
(1,1)	None	-0.088498	0.3186			
(3,2)	None	-0.185245	0.0032			
	(3,1) (3,3) <b>bond cor</b> (1,3) (1,3) (3,3) <b>bond cor</b> (2,1) (3,2) <b>compared</b> (1,1) (1,1) (3,3) <b>compared</b> (1,1)	bond compared to Islam           (3,1)         None           (3,3)         None           bond compared based of         (1,3)           (1,3)         None           (1,3)         None           (1,3)         None           (3,3)         None           (1,3)         None           (3,3)         None           (3,3)         None           (3,2)         None           (3,2)         None           (3,2)         None           (1,1)         None           (1,1)         None           (3,3)         None           (1,1)         None           (3,3)         None           (1,1)         None           (1,1)         None           (1,1)         None	(p,q)         ARCH Effect         Coefficient           bond compared to Islamic bond in Rupiah         (3,1)         None         -0.141666           (3,3)         None         -0.134245         bond compared based on maturities           (1,3)         None         -0.134245           bond compared based on maturities         -0.134245           (1,3)         None         -0.118892           (1,3)         None         -0.132803           (3,3)         None         -0.018820           bond compared to Islamic bond in US Doll         (2,1)           (2,1)         None         -0.106669           (3,2)         None         -0.185245           compared based on maturities         (1,1)         None           (1,1)         None         -0.088498           (3,3)         None         0.134245           compared based on market and denomina         (1,1)         None			

#### In terms of asymmetric volatility, Table 2 shows that significance negative asymmetric volatility was found in conventional bond return with probability less than 1%. While, in Islamic bond return, statistically did not show asymmetric volatility. Therefore, conventional bond series is more risky than Islamic bond series in Rupiah denomination which traded domestically as it more sensitive to negative information. We presume the causality is series Islamic bond characteristic where in issuing Islamic bond series, underlying asset is needed. While the purposes of issuing conventional bond is for covering deficit state budget. Besides, we also presume that emotional behavior domestic investor with Islamic bond series, makes these securities less traded for capital gain purposes.

Moreover, Table 2 shows the longer maturities conventional bond series will be less asymmetric. Negative asymmetric volatility found on bond return FR0055 for short term bond also on bond return FR0031 for medium term bond with probability significance less than 5%. The findings for comparison which shown by Table 2 are consistent with researches conducted by Evans and Marshall (1998), Goeij and Marqueering (2006) also Huang and Lu (2009) who found significant negative asymmetric volatility in short term bond and in medium term bond where the sensitivity to macroeconomics causing it.

Meanwhile, significance negative asymmetric volatility found both in conventional bond return and Islamic bond return in US Dollar denomination which traded internationally. We presume foreign investor characteristic which probably highly focused on capital gain rather than the long-term investment, therefore no different treatment in both bond types.

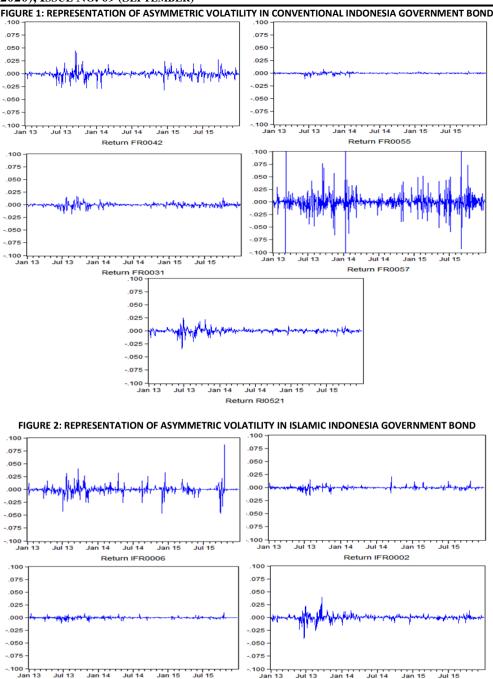
As mentioned previously, were caused by the behind reason of issuing Islamic bond series and investor emotional behavior, no asymmetric found in any Islamic bond maturities in Rupiah denomination which traded domestically. Overall, this make Islamic bond series less risky than conventional bond series. The last comparison to reconfirm domestic and foreign investor characteristic to Islamic government bond with different denomination and market.

Bond Series Mean % Std. Dev Skewness Excess Kurtosis Normality (p-value)						
Conventional bond compared to Islamic bond in Rupiah denomination						
FR0042	-0.000334	161.66	0.317555	14.03653	0.0000	
IFR0006	-0.000312	56.13	1.337058	36.28547	0.0000	
Conventional	bond compa	red based o	n maturities			
FR0055	-0.000119	671.98	-1.653893	16.84942	0.0000	
FR0031	-0.000305	193.54	-0.219681	8.990015	0.0000	
FR0057	-0.000384	59.37	0.520502	99.72160	0.0000	
Conventional bond compared to Islamic bond in US Dollar denomination						
RI0521	-0.000135	235.12	-1.336219	19.5708	0.0000	
SNI22	-0.000142	63.38	-0.995506	21.20364	0.0000	
Islamic bond compared based on maturities						
IFR0005	-0.000144	529.24	-0.74616	12.0957	0.0000	
IFR0002	-0.000236	323.06	0.276567	16.56821	0.0000	
IFR0006	-0.000312	56.13	1.337058	36.28547	0.0000	
Islamic bond compared based on market and denomination						
IFR0002	-0.000236	323.06	0.276567	16.56821	0.0000	
SNI22	-0.000142	63.38	-0.995506	21.20364	0.0000	

Return of all bond series over the period observed is negative as the effect of global economic slowdown. Table 3 shows high risk yet low return applies on comparison between conventional and Islamic bond series in Rupiah denomination which traded domestically, where the return higher as -0.000312 for IFR0006 compared to FR0042 as -0.000334, followed by higher risk. Meanwhile, Table 3 also shows that high risk high return applies on comparison based on maturities in conventional bond series. The risk follows its return since the highest risk and return found on short term conventional bond series, and less risky and return received on medium and long-term conventional bond series.

The same return and risk condition applied on the third comparison on conventional bond compared to Islamic bond in US Dollar denomination which traded internationally where higher return as much -0.000135 with higher risk as much 235.12 for RI0521 and lower return as much -0.000142 with lower risk as much 63.38 for SNI22. It also applies on comparison Islamic bond series based on maturities where the short-term Islamic bond represented by IFR0005 has the highest return as much -0.000144, the second higher found on middle term Islamic bond represented by IFR0002 as much -0.000236 and the smallest found on IFR0006 which represent long term Islamic bond. As on returns, on the risk also of having the same sequence, where the shorter bond term followed by higher risk. It could be said that the risk linear with its return. The last comparison shows that Islamic government bond traded internationally has higher return yet lower risk than Islamic government bond traded domestically.

Visual interpretations of asymmetric volatility in Indonesia government bond are presented by figures 1 respectively.



## 4. CONCLUDING REMARKS

According to explanation above, this study concludes that the E-GARCH asymmetric volatility model for the Indonesian Government Bond in Rupiah denomination which traded domestically shows the longer bond term, the higher ordo it has which makes this current volatility series more sensitive to less recent previous return volatilities and variance. Compared to Indonesia government bond traded domestically, for current volatility series traded internationally is less sensitive to more recent previous return volatilities and variance. Result also shows that significance negative asymmetric volatility returns increasingly found with shorter conventional bond period while there is no asymmetric volatility in any Islamic bond maturities. Therefore, the shorter conventional bond maturities, negative shocks will have a greater impact than positive shocks in the same magnitude. This may explain the majority of foreign ownership in the long-term bond series, namely minimizing risk while getting higher return that emerging market could give. Meanwhile, significance negative asymmetric volatility found both in the Indonesia government bond series in US Dollar denomination which traded internationally.

Return SNI22

Return IFR0005

Interesting findings on Indonesia government bond that high return associated with low risk is shown on comparison between conventional bond and Islamic bond which traded domestically. Contrary condition on comparison between conventional bond and Islamic bond which traded internationally, where high risk high return applies. The same condition of high-risk high return applies on comparison conventional bond as well as Islamic bond based on maturities which traded domestically, where the shorter maturities of bond series, receive the higher risk and return. But, when comparing between Islamic bond series in Rupiah denomination which traded domestically and Dollar denomination which traded internationally, high risk low return applies where Islamic bond series in Rupiah denomination which traded domestically has higher risk yet, lower return. Besides, either in domestic market or international market, Islamic bond is less risky than conventional bond. Therefore, whether in domestic market or international market, either investor or fund manager could combine conventional and Islamic bond series in order to minimize portfolio risk.

Policy implication that could be made based on this research is for government discretion in choosing type, denomination, maturities and market in bond issuance, as stated the purpose of bond issuance in international market for diversify and hedging foreign exchange reserve, yet high speculative also need to be considered.

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# PRIVATIZATION AND GLOBALIZATION OF HIGHER EDUCATION IN INDIA IN THE ERA OF ECONOMIC REFORMS

## NAWAB HUSSAIN RESEARCH SCHOLAR CENTRE FOR ECONOMICS STUDIES & PLANNING JAWAHARLAL NEHRU UNIVERSITY DELHI

## ABSTRACT

This paper presents the changing scenario of Higher education sector in the era of economic reforms viz. Privatization and Globalization. The paper is divided into four sections. Section "A" presents a brief discussion about the structural changes and move towards privatization and globalization. Section "B" is deals with the theoretical aspects and economic rationale towards privatization. The section also defends why privatization of higher education is theoretically a flaw. This notion contends the merit good nature of higher education. Section "C" presents the policy shifts towards privatization and globalization in higher education. The section also gives trends in this regard. In the Section "D", challenges and conclusion is drawn.

#### **KEYWORDS**

Higher education, privatization, globalization, economic reforms.

## JEL CODES

123, 125.

## INTRODUCTION

The phenomenon of globalization, which transformed world trade, communications and economic relations in the latter part of the 20<sup>th</sup> Century, is having a profound impact on education, in general, and higher education, in particular. In respect to higher education, this means deregulating the sector and widespread privatization and advent of foreign investment in Education. With the onset of Neo-liberal regime, the Higher Education Sector in India is witnessing drastic changes. The share of government in the provision of Higher Education is shrinking and consequently a move towards privatization and Globalization of higher education is emerging. Policy measures aimed at reforming education financing was made aiming diversification of the sources of funding by developing alternative arrangements to meet the costs of providing the education. Consequent to the adoption of structural adjustment programmes, the reforms suggested by international funding agencies (World bank, 1994) particularly for developing countries included cost- recovery mechanisms including cost sharing with students, redefining the role of the government by evolving a policy framework to make the sector more market friendly and public institutions more autonomous, encouraging greater differentiation of institutions of higher education including development of private institutions and priority investments towards quality improvement. After signing of General Agreement on Trade in Services (GATS) in 1995 and the formation of WTO, a drive towards opening of education had started. Consequently, Foreign Direct Investment (FDI) in education, including higher education, is allowed in India under the automatic route, without any sect oral cap, since February, 2000.

#### PRIVATIZATION OF HIGHER EDUCATION

Tilak (1991) presents different versions of privatization of higher education. The first is the extreme version of privatization which implies total privatization of higher education under which universities are managed and funded by the private sector. Over here, education is treated like any other private good the supply of which is guided under the objective of profit and sales maximization. Strong degree of privatization means recovery of full costs of public higher education from users. The third one he terms as Pseudo- privatization, which includes privately managed but government aided educational institutions.

Tilak (2005) argued that an important development of the 1990s refers to sustained efforts towards privatization of higher education in India. There have been significant efforts towards financial privatization of higher education, which assigns only the motive of profits maximization. Private institutions of higher education all tends to become 'entrepreneurial universities. He also remarked that the emerging private higher education systems are found to be creating serious problems in terms of access, quality and equity in higher education. <sup>1</sup>

#### **RATIONALE FOR PRIVATIZATION OF HIGHER EDUCATION**

The economic rationale for the privatization of higher education is put on the grounds of efficiency, equity and pragmatism. The social rates of return are found to be consistently lower than private's rate of return to education, and hence it is recommended that public subsidies could be reduced, and individuals could be asked to pay for their education. It is argued that the nature of public subsidies in higher education would be regressive and thereby increasing inequalities by transferring resources from poor to the rich<sup>2</sup>.

The notion for the privatization of higher education also comes from the point that public sector cannot fund higher education when sectors of mass education are starved of even bare needs. The funding on higher education from public domain is low and in an era when demand is expected to increase, there is a need to explore the alternative source of financing higher education. In the changing circumstances of fiscal constraints owing to adoption of economic reforms, there is a move to keep only the elementary education under the public sector's domain and progressive increase the role of private sector's involvement in meeting the funding needs of secondary education and beyond. The higher education sector, in particular, was proposed to be treated as quasi-public good and by this measure, the burden of financing higher education was to be shifted gradually to the private sector and the private individuals of the household sector. It is believed that government funded expansion is neither feasible nor desirable. This argument is based on two assumptions. One, resource constraint, both the centre and a majority of states, are supposed to comply with FRBM Act. This is bolstered by the faith in the assumption that government funded Higher Educational institutions are inherently inefficient and are incapable of delivering quality education. Two, the private sector driven by profit is argued to be efficient internally in a competitive market. So, infusion of the market principle to foster competition in education is a major element of policymaking. The market confers sovereignty to buyers (students) and sellers (providers). The focus is on completion to achieve efficiency and eventually quality by toning up the internal functioning of Higher Education Institutions to gain mileage from competition. It is due to the very nature of education as a commodity that an optimal investment has been ever realized. Education is both a consumption and commodity. The commodity produces both direct and indirect benefits and it is

<sup>&</sup>lt;sup>1</sup> Tilak (2005) contends a case for public provision of higher education. He argues, it was 1980s and 1990s that brought a complete swing of pendulum in which social democratic values and welfare state concerns were replaced by the free market philosophy that stresses individual economic values and gains. <sup>2</sup> This argument is widely propagated by Psacharopoulos (1994,1997) and world bank (1994)

## CASE FOR GOVERNMENT ROLE IN HIGHER EDUCATION

The externality associated with higher education includes improvement in health, reduction in population growth, reduction in poverty, reduction in crime, rapid adoption of new technologies, strengthening of democracy, ensuring of civil liberties etc and even dynamic externalities.<sup>3</sup>

Education is a merit good and the consumption of which needs to be promoted.<sup>4</sup>

The need for education subsidy in a country is also due to the fact that financing of education via private channels due to presence of Imperfect capital markets inhibits students from borrowing against the uncertain future returns of higher education. Even more importantly, the lenders would be reluctant to accept risk backed only by uncertain future incomes of the reluctant debtors and hence there is the need for state subsidies.<sup>5</sup>

Khadaria, B. (1989) has addressed the 'subsidies question' in higher education. He has discussed three issues; first, economic rationales of subsidies in higher education; second, an alternative to the 'user change proposal' i.e. the subsidy- taxation proposal; and last, an examination of 'user charge proposal, in the higher education. He has explained the economic rationales for which a modern democratic welfare state would choose to subsidize in higher education. First is that higher education generates externalities and second is that the capital market for educational investment is both incomplete and imperfect.

#### **NEO-LIBERAL POLICIES AND DRIVE TOWARDS PRIVATIZATION**

With the onset of reform era, important policy changes have been introduced in the field of higher education. The economic rationale being the sector as a nonmerit good and a quasi- public good. The first direct impact of neo-liberal policies in higher education came with the coming of Swaminathan Committee on Higher Education. The Swaminathan Committee (AICTE, 1994) appointed by Ministry of Human resource and Development looked into the possibilities of resource mobilization in technical education essentially through cost- recovery from students. Some of the important recommendations of the committee are:

- Creation of corpus funds in institutions
- Establishment of an Educational Development bank of India with an initial capital of Rs. 3000 crores.
- Reducing the share of salaries in recurring expenditure from the existing level of 80 percent to 60 percent
- Enhancing fees to recover at least 20 percent of the recurring expenditure

On the same account, the Punnayya Committee (UGC, 1993) looked into the funding of Central Universities and made the following recommendations:

- Maintenance grants to be based on unit costs and to be stabilized at a certain acceptable level
- Government's funding to be limited to dearness allowance and maintenance grant.
- Universities to mobilize funds, at least 15 percent of total recurring expenditure at the end of first five years and 25 percent at the end of 10 years.
- Creation of corpus funds to meet the infrastructure development.
- Increasing the student fees keeping in view the rate of inflation.
- Subsidies on many items to be reduced.

The reform measures suggested in the reports of both the committees had two distinct aspects, viz. improving efficiency in the functioning of institutions of higher education to reduce waste and saving resources and mobilizing resources from other than the government. In 1997, Ministry of Finance in a paper defined Higher Education as a non- merit good for which the government subsidies has to be cut from 90 to 25 percent in three years and further to 25 percent in another two years. However, due to stiff criticism by left parties, it was rejected. The move towards privatization was given a new shape when the finance ministry in December 2004 submitted a report titled 'Central Government Subsidies in India' under which higher education was listed as Merit -2 in terms of desirability of subsidization. The advocacy for privatization of Higher education was taken a step further with Amabani- Birla Report on "*A Policy framework for Reforms in Education*" submitted to prime minister's council on Trade and Industry in 2000. Considering education as a profitable market, the Report recommended an immediate privatization of several segments of higher education and full cost recovery from segments. Also, any form of political activism in universities was refuted by the report so that higher education be depoliticized and removed from the purview of any kind of trade union influences. In the same year, UGC came with model Act for Universities. The University Grants Commission while accepting many considerations of the Ambani- Birla Report presented a concept paper titled "Towards Formulation of Model Act for Universities. With the recommendation by National Knowledge Commission Report for the establishment of 50 national universities functioning as "exemplars for the rest of the nation" and the notion public partnership in higher education was initiated. The report promoted commercial investment either directly by private entrepreneurs or indirectly through public – private partnership.<sup>6</sup>

#### EMERGENCE OF FOREIGN INSTITUTIONS IN HIGHER EDUCATION

According to Healy<sup>7</sup>, higher education is a new market with enormous opportunities of profit. With the establishment franchising (and later joint and sole ventures off shore) production cost is lowered as both capital investment and labour cost in off- shore facilities are lower than home. This also helps in increasing the size of their markets, by making their products accessible to a wider population who can't afford to study at home campus. Healy points Higher education as a 'superior good' in the sense that the income elasticity of demand for higher education is above unity. This means in developing countries, as the per capita GDP raises, the demand for higher education raises proportionately faster. Though 100 per cent foreign direct investment through automatic route is permitted in the education sector since 2000; the present legal structure in India does not allow granting of degrees by foreign educational institutions here. So there is no offshore campus of any foreign university in India is established till now. There are, however, many foreign universities and education service providers operating in India through twinning programmes. The proposed Foreign Educational Institutional Bill<sup>8</sup> would facilitate globally-renowned institutes to participate in India's higher education sector. The Bill seeks to regulate the entry and operation of foreign educational institutions seeking to impart higher education. HRD minister Kapil Sibal advocates the Bill by arguing "I don't see why there is opposition to foreign investment in education. Given that the gross enrolment ratio in higher education in India is 12.4 percent compared to an international average of 23 %- it shoots up to 55 % in developed nations- what we need right now is a focus on expanding supply to meet growing demand. The only way to address that in a sustainable fashion is government investment- supplemented by public- private partnerships- perhaps- aimed at providing affordable education underwritten by the national exchequer." The proponents of Foreign Educational Institutional Bill argue that it would solve the problem of access, enable Indian students to access quality higher education in the country itself at relatively much lower cost, not allow the outflow of our foreign exchange reserves, create competition with the local institutions enabling them to become internationally competitive, and create new institutions and infrastructure and generate employment. The other argument favoring FDI in higher education is that it will solve the problem of access and enable Indian students to access quality higher education in the country itself at relatively much lower cost, not allow the outflow of our foreign exchange reserves, create competition with the local institutions enabling them to become internationally competitive, and create new institutions and infrastructure and generate employment.

The counter argument in this regard is based on the grounds that education imparted by the foreign institutions may not be able to foster national development. Local needs and local problems will not be addressed. The curriculum, standard, faculty and requirements will all the determined by the sponsoring institutions

<sup>&</sup>lt;sup>3</sup> Schultz, Theodre W (1972) in his writing 'Optimal Investment in College Instruction: Equity and Efficiency" contends the notion of positive externalities associated with education that covers a wide range of areas. He contends the public good characteristics of education.

<sup>&</sup>lt;sup>4</sup> The characteristic of merit good associated with education was explained by Musgrave in his book on theory of public finance (1959)

<sup>&</sup>lt;sup>5</sup> This argument is taken from Arrow, Kenneth J (1993): 'Excellence and equity in Higher Education'.

<sup>&</sup>lt;sup>6</sup> Thomas Joseph in his article Commission versus Commission in Higher Education, 2007 states that National Knowledge Commission stressed on a largely unregulated framework for encouraging private players and foreign collaboration in higher education on maximization of cost recovery from students.

<sup>&</sup>lt;sup>7</sup> Arguments in this section is supported by Healey (2008)

<sup>8</sup> Foreign Educational Institutions (Regulation of Entry and Operations) Bill was tabled in Lok Sabha on May, 2010 despite opposition from left parties. The bill if passed will provide legal status to foreign education provided and will formally open up the education sector.

and may not serve the needs of the recipient country. In India access to Higher education is limited to 12 per cent of the relevant age group. The invasion of foreign universities in India will perpetuate the problem of equity and access to higher education and nullify the gains hitherto achieved. There is further danger of hike in the cost of education with the coming of foreign universities. Secondly, Globalization is increasingly centering on consumerism, where learning is moving away from being about analysis, discussion and examination towards a product to be bought and sold. It is highly marketed, advertised and packed. Similarly, with globalization of education, localization is slowly being wiped. This has serious consequences in the progress of cultures, growth of indigenous research, languages and learning styles.9

#### TRENDS AND FIGURES SUPPORTING PRIVATIZATION OF HIGHER EDUCATION

The number of universities has grown more than six times between 1970-71 and 2011-12<sup>10</sup>. In 1970-71, there were 103 universities in India which has reached to 659 by 2011-12. Much of the increase happened in the era of economic reforms as untill 1990-91 only 80 new universities were established. The number of colleges has increased from 7,346 in 1990-91 and reached 33,023 in 2011-12. The Gross Enrolment Ration in Higher Education was 6.0% in 1989-90 which has increased to 12.3 percent in 2006-17 and reached 17.9% in 2011-12. The clear trend of neo-liberal policies is seen when we look at distributional structure in Higher education. Out of 659 universities functioning in 2012, 191 were Private Universities thereby 28.9 percent of Indian Universities were in the private hands. The level of privatization is much higher in college education. Out of 33,023 functioning colleges in 2012, 19,930 colleges were run by private players. In terms of percentage, it accounts for 60 percentages of overall colleges in India. The share of Private sector is much higher in terms of Diploma- granting institutions were out of 12,748 institutions, 9,541 were operated by private players and remaining by state governments. The participation of Central Government is zero in this avenue of education. The total enrolment in 2012 was 18.5 million in universities and colleges and 3.3 million students were enrolled in Diploma - granting institutions. The share of government expenditure in education and particularly higher education is a matter of great concern. The table given below depicts the appalling condition of government expenditure in higher education:

TABLE 1					
Year	On Education as a percentage of GDP	On Higher Education as a percentage of GDP			
2006-07	3.64	1.14			
2007-08	3.4	1.09			
2008-09	3.77	1.23			
2009-10	3.85	1.25			

## (Source: CSO)

At the inception of planning, India was spending barely 17 crores on higher education. Though, in absolute terms the share has increased over the decades, it failed to cope with the growing population, rising prices and greater demand for higher education. In 2006-07, the expenditure on higher education was 1.14 percent of GDP while that on education as a whole, it was 3.64 percent. In 2007-08 both the share of education in overall GDP and share of expenditure on higher education as a percentage of GDP declined. In the above selected years of the later half of first decade, the expenditure on education was low. Throughout the planning era, the share of expenditure for higher education has remained very low and remained stagnant around 1 percent of GDP. This clearly depicts lack of government will and a tendency towards neo-liberalism.

#### CHALLENGES AND TASK AHEAD

The higher education in India is currently opened to global competitiveness in terms of many factors. Some of these important factors are in terms of access, equity, relevance, quality, privatization and internationalization of higher education in the face of a resource crunch. The growth trends in higher education seem to have favor with those courses of study that have high economic payoffs. The participation of private sector has resulted in the truncated growth of higher education. The privatization has also brought the era of dual price structure. Private unaided but government recognized institutions are charging exorbitant tuition fees amounting to almost full cost pricing or more whereas fees in government supported colleges remained low. The end result is the emergence of an imperfect market for provision of higher education. The growth of these institutions was typically characterized by the charging of high 'capitation fees'. Only certain types of course that are in demand is encouraged and secondly, they are adversely affecting equity considerations as the admissions were based on 'the ability to pay' approach. Tilak (2005) argues the prime objective of higher education being human resource development can't use the concept of 'profit' in the theory of educational finances as it hampers the three major goals viz. equity, efficiency and diversity. The present Gross Enrolment Ratio of 14.9 percent is much lower in comparison to International Standards and is far behind than developing countries like China, Brazil, Malaysia and Philippines. As of march 2010, only 32.3 % (159) of the total number of Indian Universities had been accredited by the National Assessment and Accreditation Council. Many of private colleges in India are therefore running without affiliation or recognition.

The need of the day is to increase public funding of higher education. A market driven ethos of higher education will hamper the growth of welfare state, and education like any other private commodity will be demanded by those who have ability to pay.

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<sup>&</sup>lt;sup>9</sup> A critical analysis of Globalization and Higher education is presented by RUi Yang (2003) who argues globalization as a fundamentally market driven process which embodies a transformation in the spatial organization of social relations and transactions generating transcontinental or interregional flows. It creates more challenges than opportunities.

<sup>&</sup>lt;sup>10</sup> The trends have been generated with the help of data taken from Higher Education in India: Twelfth Five Year Plan (2012-2017) and beyond presented by FICCI Educational Summit 2012

## A STUDY ON OPTIONAL TAX REGIME FOR INDIVIDUAL AND HINDU UNDIVIDED FAMILY TAXPAYERS UNDER SECTION 115BAC OF THE INCOME TAX ACT, 1961

## SANJIB GHIMIRE RESEARCH SCHOLAR KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY GUWAHATI

## ABSTRACT

In this paper, a humble attempt has been made to analyze whether introduction of the new tax regime by the Government of India simplifies the provisions and compliances of income tax laws for individuals and HUFs and whether it is more beneficial (tax saving) than the existing tax structure. In comparison to the existing tax regime, the new tax regime has low income tax slab rates. But the various exemptions and deductions available under the existing income tax regime have been disallowed under the new income tax regime. The current study reveals that the new tax regime introduced through Section 115BAC has provided an option for individual and HUF taxpayers for a simpler and compliance friendly tax structure in comparison to the existing tax structure, however, due to certain conditions stated therein, the new tax regime might not be beneficial for taxpayers claiming deductions and exemptions from their income.

#### **KEYWORDS**

section 115BAC, optional tax regime, income tax, Individual and HUF taxpayers.

## JEL CODES

H24, K34.

## INTRODUCTION

Through the Finance Act, 2020, the Government of India has introduced a new and optional tax regime for Individual and Hindu Undivided Family (HUF) tax payers under the Income Tax Law. The introduction of the same under a newly inserted section 115BAC of the Income Tax Act, 1961 has been justified by the Government as a major step towards simplification of tax laws in India. Since the Individuals and HUFs constitute the largest base of income tax payers in India, the new tax regime is expected to influence the tax planning and compliances of income tax laws of a huge number of tax payers. It is expected to provide significant relief to the individual and HUF taxpayers and simplify the tax structure under the Income Tax Law.

In this paper, a humble attempt has been made to study the new and optional tax regime under Section 115BAC of the Income Tax Act, 1961. A comparison of the new and optional tax regime vis-à-vis the existing tax regime has been made such that the pros and cons of opting the new tax regime is observed. Further, an attempt has been made to study whether the new tax regime is more beneficial than the existing tax structure.

## STATEMENT OF THE PROBLEM

Till the Financial Year 2019-20, the taxpayers were required to compute their taxes on total income as per the rates specified in the Finance Act of every year and they did not have any option with respect to the same. The introduction of an optional tax regime under Income Tax Law from Financial Year 2020-21 for the Individual and HUF taxpayers in addition to an existing tax structure has provided them an option to choose the appropriate tax structure such that their income tax to be paid is minimum. The individual and HUF taxpayers is expected to have a detailed understanding of the new tax regime such that they can avail its full advantage of the optional tax regime as well as comply with income tax laws more efficiently. Further, calculation of total tax amount under both the regimes might need to be done, in order to identify the tax regime beneficial to the taxpayer. Again, how does the new and optional tax regime simplify the tax structure resulting in easy compliance and procedure, needs to be studied. Hence, an attempt has been made to study the same and address the research problem.

## **OBJECTIVES OF THE STUDY**

- 1. To study the significance of the optional tax regime in simplification of tax structure under Income Tax Law.
- 2. To study the pros and cons of opting for the optional tax regime for the individual and HUF taxpayers.

## **RESEARCH QUESTION**

- Following research question has been set for the study.
- 1. Has the new and optional tax regime simplified the tax structure for individual and HUF taxpayers?
- 2. Has the new and optional tax regime provided the individual and HUF taxpayers with a better alternative for compliance of tax laws?

#### **METHODOLOGY OF THE STUDY**

The current study is descriptive in nature and is based on secondary sources of information. The Finance Act, 2020 as well as the Income Tax Act, 1961 form the major source of secondary information for the study. Section 115BAC of the Income Tax Act, 1961 introducing the new and optional tax regime has been studied and observed. An attempt has been made to interpret the several provisions laid down under section 115BAC of the Income Tax Act, 1961, such the effect of such provisions in tax liability and compliance of income tax laws is understood. A comparative analysis of the new and optional tax regime vis-à-vis the existing tax regime has been done. The important observations and findings with respect to the present study have been carefully disseminated in the sections below such that the objectives set for the study are fulfilled.

## ISSUES OBSERVED BY THE GOVERNMENT IN THE EXISTING TAX STRUCTURE UNDER INCOME TAX LAW

In the Asia Pacific Tax Complexity Survey conducted by Deloitte (2017), it has been reported that tax laws in India are second most complex in the Asia-Pacific region. Further, the fact that only 4.18 % of the total population in India filed their income tax return in 2018-19 emphasizes on the need to simplify the tax laws for easy compliance and expanding the tax base. A majority of the tax payers in India are dependent on a tax professional for tax planning and other tax related compliances. With respect to tax payers at lower or middle income level, managing a tax professional is often very difficult.

While presenting the Budget for the year 2020-21, Union Finance Minister, Nirmala Sitharaman (2020) said that "Currently the Income Tax Act is riddled with various exemptions and deductions which make compliance by the taxpayer and administration of the Income Tax Act by the tax authorities a burdensome process,". Inability to comply with provisions of tax laws has been a major issue for a large number of tax payers. She raised the issue of small individual taxpayers being dependent on tax professionals in order to comply with tax laws. Highlighting on several issues with respect to difficulties in compliance of tax laws for small tax payers she emphasized on the need for reduction of provisions for simplification and easy compliance of the same.

## INTRODUCTION OF A NEW AND OPTIONAL TAX REGIME WITH REDUCED PROVISIONS UNDER INCOME TAX LAW

Through the Finance Act, 2020, the Government of India inserted of a new Section 115BAC in the Income Tax Act, 1961, for introducing a new tax regime with reduced provisions and compliances. The Government has been justified introduction of the same as a major step towards simplification of tax laws in India. The provisions of the new section 115BAC shall be applicable with effect from 1<sup>st</sup> April, 2021 i.e. from the assessment year 2021-22. The new tax regime shall be applicable to individual and HUF taxpayers. Through the new tax regime, the Government proposes a simplified tax structure with reduced tax rates for the Individual and HUF tax payers. However, opting for the same will require them forgo certain deductions and exemptions. SBI Research's Ecowrap (2020) has estimated that less than 10% of the total taxpayers are expected to migrate in new tax regime as they are the only ones who will be benefited.

## IMPORTANT PROVISIONS WITH RESPECT TO OPTIONAL TAX REGIME UNDER SECTION 115BAC OF THE INCOME TAX ACT, 1961

- 1. The provisions of this section shall be applicable to only individual and HUF category of persons.
- 2. The new tax regime is in addition to the existing tax regime, hence provide an option to taxpayers to choose a tax regime suitable or beneficial to them.
- 3. The new tax regime has six different slab rates ranging from 5% to 30% as shown in the **Table 1**.

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#### TABLE 1: DIFFERENT SLAB RATES UNDER NEW TAX REGIME

ABLE I. BITTERENT SEAD RATES ONDER NEW TAX REGIN				
SI. No.	Total Income	Rate of Tax		
1.	Upto ₹ 2,50,000	Nil		
2.	From ₹ 2,50,001 to ₹ 5,00,000	5%		
3.	From ₹ 5,00,001 to ₹ 7,50,000	10%		
4.	From ₹ 7,50,001 to ₹ 10,00,000	15%		
5.	From ₹ 10,00,001 to ₹ 12,50,000	20%		
6.	From ₹ 12,50,001 to ₹ 15,00,000	25%		
7.	Above ₹ 15,00,000	30%		

 Under the new tax regime, the total income of the individual or Hindu undivided family shall be computed without availing the exemptions or deductions specified in Table 2.

ABLE 2: DEDUCTIONS	<b>/EXEMPTIONS DISALLOWED</b>	UNDER NEW TAX REGIME

SI. No.	Deductions/Exemptions	
1	Exemption u/s 10(5) towards Leave travel concession	
2	Exemption u/s 10(13A) towards House rent allowance	
3	Deductions u/s 10(14) other than certain specified deductions	
4	Allowances to MPs/MLAs u/s 10(17)	
5	Allowance for including income of minor child u/s 10(32)	
6	Deduction u/s 10AA for SEZ unit	
7	Standard deduction, Entertainment allowance and Professional tax u/s 16	
8	Interest on housing loan for self-occupied and vacant property u/s 24(b)	
9	Depreciation under section 32(1)(iia)	
10	Deduction u/s 32AD (Investment in new plant or machinery in notified backward areas in certain States)	
11	Deduction u/s 33AB (Tea development account, coffee development account and rubber development account)	
12	Deduction u/s 33ABA (Site Restoration Fund)	
13	Deduction for expenditure on scientific research u/s 35(1)(ii) or 35(1)(iia) or 35(1)(iii) or 35(2AA)	
14	Deduction in respect of expenditure on specified business u/s 35AD	
15	Deduction for expenditure on agricultural extension project u/s 35CCC	
16	Deduction from family pension under section 57(iia)	
17	Deduction under Chapter VIA other than deduction in respect of employers contribution to notified pension scheme u/s 80CCD or	
18	Deduction in respect of employment of new employees u/s 80JJAA	

# 5. However, the Central Board of Direct Taxes (2020) has specified certain exemptions with respect to tour, travel and conveyance expenses incurred officially vide Notification No.38/2020 dated 26<sup>th</sup> June, 2020, which a taxpayer opting for the new tax regime can claim from his income.

- 6. Any loss under the head "Income from house property" cannot be set off with any other head of income.
- 7. An individual or HUF having business income cannot claim set-off of the brought forward business loss or unabsorbed depreciation. The deductions not available under the new regime to the extent they relate to deductions or exemptions have been withdrawn.
- 8. All Individuals and HUFs without any business income shall have the option to choose the appropriate tax regime each year. The option needs to be exercised at the time of filing of return of income for every year.
- 9. In case of tax payers with business income, once the option for new tax regime is exercised for a previous year, the same shall be valid for that previous year and all subsequent years. And then it can be withdrawn only once for a previous year other than the year in which it was exercised. Thereafter, the tax payer with business income shall never be eligible to exercise option under this section, except where such person ceases to have any business income.
- 10. The provisions of the section also clearly states that to be eligible for exercising the optional tax regime, tax payer has to mandatorily furnish the return of income on or before the due date for filing the same.

## COMPARISON OF THE NEW AND OPTIONAL TAX REGIME VIS-À-VIS THE EXISTING TAX REGIME

In this section, a comparison of the newly introduced optional tax regime has been made with the existing tax regime. Tax payers opting for the new tax regime have been provided a new income tax slab rate for computation of tax liability on their total income. A comparative summary of income tax slab rates under the new and existing income tax regime has been shown in **Table 3**.

### TABLE 3: A COMPARATIVE SUMMARY OF INCOME TAX SLAB RATES UNDER THE NEW AND EXISTING INCOME TAX REGIME

SI. No.	Total Income	Rate of Tax	
		New Tax Regime	<b>Existing Tax Regime</b>
1	Upto Rs 2,50,000	Nil	Nil
2	From Rs 2,50,001 to Rs 5,00,000	5 percent	5 percent
3	From Rs 5,00,001 to Rs 7,50,000	10 percent	20 percent
4	From Rs 7,50,001 to Rs 10,00,000	15 percent	20 percent
5	From Rs 10,00,001 to Rs 12,50,000	20 percent	30 percent
6	From Rs 12,50,001 to Rs 15,00,000	25 percent	30 percent
7	Above Rs 15,00,000	30 percent	30 percent

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The Table 3 reveals that a different set of income tax slab rates has been provided under the new tax regime. However, the basic exemption limit upto a total income of Rs. 2,50,000/- and the tax rate of 5% for the income slab of Rs. 2,50,001/- to Rs. 5,00,000/- is same in both the tax regimes. The new tax regime has seven income slabs with different tax rates in comparison to four income slabs under the existing tax structure. The highest income slab under the existing tax structure is 10 lacs and above in comparison to 15 lacs under the new tax regime. And the maximum tax rate in both the cases is 30%. The tax structure in both the cases is progressive in nature.

The Table 2 reveals that that a number of important tax saving options of the tax payers have been disallowed under the new tax regime. A salaried individual opting for the new tax regime will have to forego exemptions from allowances such as HRA, Leave Travel Concession, Entertainment Allowance, etc. The standard deduction of Rs. 50,000/- has to be forgone. The deduction from house property income with respect to interest on housing loan u/s 24(b) reduced the taxable income of those availing housing loan significantly. Further, disallowance of the deductions under Chapter VIA with respect to various tax saving investments usually availed all individuals and HUFs has also been observed.

### PROS AND CONS OF THE NEW TAX REGIME

The various pros and cons of the new tax regime vis-à-vis the existing tax regime have been highlighted below:

Pros

- a) Reduction in tax rates: It has been observed that under the new tax regime, taxpayers are offered concessional tax rates in comparison to tax rates in the old tax regime.
- b) Lesser provisions for easy compliance: Many of the exemptions and deductions has been disallowed under the new tax regime making it simpler with reduced provisions. Hence, compliance with income tax law has become easier under the new tax regime.
- c) Increased liquidity: Lowered tax rates and no scope for tax-saving investments under the new tax regime would lead to increased liquidity in the hands of tax payers.
- d) Scope for customizing investments: Under the existing tax regime, taxpayers are required to make investments in certain notified tax-saving options such that they can avail deductions from total income, thus restricting their choices for investment. However, the new tax regime does not provide any scope for tax-saving investments and the taxpayers are now free to invest their savings in plans and schemes of their choices.
- e) Reduced dependence on tax professionals: The new tax regime has been designed to assist the small taxpayers in easy compliance of income tax laws. Due to significant reduction in provisions under the new tax regime, taxpayers can comply with the income tax laws without the support and assistance of tax professionals.

#### Cons

- a) Disallowance of deductions and exemptions: Several deductions and exemptions which taxpayers can claim from their total income under the existing tax regime has been discontinued under the new tax regime. Salaried individuals who have been availing a number of important deductions and exemptions will have to forego the same if they opt for the new tax regime.
- b) Non-availability of carry forward and set off of losses: Along with deductions and exemptions being disallowed under the new tax regime, carry forward and set off of losses are also disallowed. Set off of losses from house property cannot be claimed under the new tax regime as well as carry forward of losses from business.
- c) Increased complexity: The desire to identify a better alternative out of the two options, might require an in-depth analysis and calculation of taxes under both the tax regimes, thus increasing the complexity of tax structure due to introduction of the optional tax regime.
- d) Restrictions in exercising the option for taxpayers having business income: Individual and HUF taxpayers having business income has been restricted from exercising the option for an appropriate tax regime every year. In case of tax payers with business income, once the option for new tax regime is exercised for a previous year, the same shall be valid for that previous year and all subsequent years. And then it can be withdrawn only once for a previous year other than the year in which it was exercised. Thereafter, the tax payer with business income shall never be eligible to exercise option under this section, except where such person ceases to have any business income.
- e) **Requirement for Tax Planning:** Identification of an appropriate tax regime for a tax payer might require computation of tax liability under both the regimes and even require proper tax planning. The purpose of introduction of the new tax regime being simplification of income tax law and its easy compliance, needs to be reviewed further.
- f) Increased complexities in TDS compliances for employer: The employer might have a two different category of employees of which one opting for the new tax regime and the other opting for the existing tax regime. Under such circumstances, compliance with TDS provisions on the part of the employer is expected to become more complicated than ever.

From the above discussion, it could be interpreted that the new tax regime introduced through Section 115BAC has provided an option for individual and HUF taxpayers for a simpler and compliance friendly tax structure in comparison to the existing tax structure, however, due to certain conditions stated therein, the new tax regime might not be beneficial for taxpayers claiming deductions and exemptions from their income. The new tax regime has advantages but the conditions stated therein with respect to its application is likely to create a dilemma for the tax payers whether to opt for the same or not.

#### SUMMARY AND CONCLUSION

The insertion of new Section 115BAC into the Income Tax Act, 1961, through the Finance Act, 2020 has resulted into provision for a new tax regime in addition to the existing tax regime. The new tax regime has been kept optional and the taxpayer can choose either of the two tax regimes. The new tax regime has been restricted to individual and HUF category of taxpayers. The Government of India has justified the introduction of the new tax regime as a major step towards simplification of income tax law in India and plans to further review and rationalize the tax structure making it easier to comply with. It offers concessional tax rates in comparison to the existing tax regime. A taxpayer without any business income can exercise the option of choosing an appropriate tax regime every year at the time of filing of return of income. In order to ascertain the tax regime beneficial for a taxpayer might require him to do the computation of tax liability under both the tax regimes every year.

#### LIMITATIONS OF THE STUDY

- 1) The study has been done on the basis of secondary sources of information. Due to Covid-19 pandemic, collection of primary data from the taxpayers has been assumed to be difficult to gather in the most appropriate manner.
- 2) Although the study provided an ample scope for showing computation of total tax liability under both the income tax regimes for different values of hypothetical income earned by the taxpayer, the same has not been done to restrict the study from being lengthy.

#### SCOPE FOR FURTHER STUDIES

- The new and optional tax regime has become effective 1<sup>st</sup> April, 2020. Several issues and challenges with respect to its adoption by taxpayers, administration
  of the same in the part of the tax authorities, administration of TDS provisions by the employer etc. might arise in the future. As such, it provides scope for
  further studies with respect to the same.
- 2) In the future, similar study can be done with the help of primary data collected from the taxpayers once their return filing process for a year is completed.

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## THE STUDY OF INDIAN NEWSPAPER MARKET COMPETITION: A BRIEF MARKET ANALYSIS

## KHUSHBOO STUDENT CENTRE FOR INTERNATIONAL TRADE & DEVELOPMENT JAWAHAR LAL NEHRU UNIVERSITY NEW DELHI

#### ABSTRACT

In the print industry, the Indian newspaper is the second-largest market in the world after China, where over 78.8 million copies are sold every day. The paper tries to look at the trend of market structure, performance, and conduct of the Indian newspaper industry. It tries to compare with the market model with other countries. The study found that regional players saw growth in the newspaper industry with a rise in operating profit while national players saw a declining trend.

#### **KEYWORDS**

Indian newspaper market, market analysis, market competition, market trend.

# JEL CODE

L82

## INTRODUCTION

The print industry, the Indian newspaper is the second-largest market in the world after China, where over 78.8 million copies are sold every day. (World Association of Newspapers, WAN,2017). Japan stands at third position with 70.4 million copies beating the US and Germany. In the context of the newspaper market, India is specific because the market structure is highly fragmented. Broadly the market is segmented into National daily and vernacular daily like Hindi, Marathi, Telegu, Gujarati, and many other languages. The Indian newspaper industry is now considered one of the largest industries in the Asian market. Comparing it globally, the US market and other developed nations have witnessed an inverse growth between print media and online with a declining readership and circulation during the era of internet and market digitalization.

On the contrary, in emerging economies like Indian and China, the market continues to hold its position and has seen a parallel growth trend. The parallel growth's primary reasons are low internet penetration and direct door delivery of the newspaper at home. (Kumar et al.,2015). In particular, the Indian newspaper market has been a growing and vibrant market. According to the Economic survey (2017-2018), the market is continuously rising in newspaper circulation from 150 million in 2002, rising to 242.6 million in 2018. Several factors like an increase in literacy rates, digitalization of the market, and political awareness contributed to its growth. There is strong growth potential and substantial market opportunities in the newspaper market in the coming years as the market has not yet matured. This market study is essential as this market has given tremendous employment opportunities in the Indian economy. Newsprint media has helped in generating employment for a large section of people. The percentage shares of total number persons engaged and annual wages and salaries (in lakhs), including employers' contribution in publications of newspapers, journals, and periodicals out of total publishing activities including publication of books and others, are around 0.80 and 0.86 respectively. It also has a wide range of contributions to the GDP of India. According to the Annual survey industries report of 2017, the percentage share in aggregate GVA (Gross value addition) by publishing activity out of total output is 0.18. Its wider contribution to the Indian economy in GDP and employment market, it relevant to study the particular market.

#### **OBJECTIVE OF THE STUDY**

This paper's main objective is to analyze the market structure, performance, and conduct of the Indian newspaper industry. It tries to compare the market model with other countries. It tries to find out if the market players are fighting in price competition or product differentiation. The purpose of the paper is to analyze whether regional players are engaged in market cooperation or competitions so that we can derive policy implications for the future growth of this industry.

#### **RESEARCH METHODOLOGY**

The paper uses the data of newspaper publishing companies on financial performance is collected from 2015 to 2019 from prowess and EMIS. It tries to look at the trends of financial indicators like expenses and operating profit of both regional and national players; the study infers their current economic situation of the newspaper industries. The average value of these variables is normalized by dividing total income to get performance indicators. We identify a few regional players and national payers from the data. Then data of each variable is a plot against the year 2015 to 2019 to look at the trend. We compare both trends of financial indicators of both national and regional players to reach the conclusion.

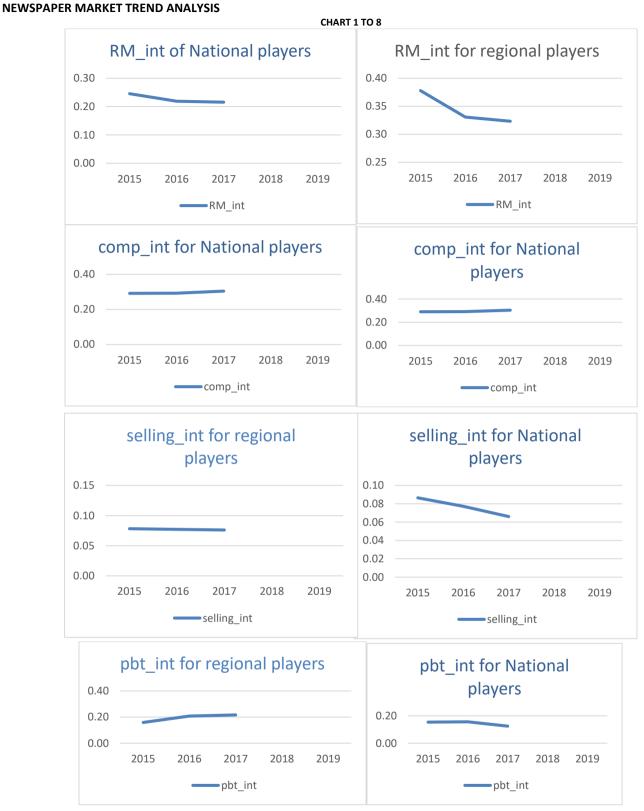
#### **INDIAN PRINT INDUSTRY**

Packaging printing is the fastest growing industry. It grew around 73% from 2006 to 2011(PRIMIR' World Wide Market for Print' study). The industry is vast and divided into different subcategories based on their publishing activities like newspaper publishing, Magazine publishing, Print advertising. The industry can also be categorized as Upstream, such as paper and paper products, and downstream markets involve printing and allied machines and print ink market. There are seven major print ink players in which Huber is the leading has print ink market of Rs 7000 million annual turnovers. (Indian Mirror).

#### **GROWTH IN THE INDIAN NEWSPAPER INDUSTRY**

TABLE 1							
Readership of any daily	2014	2017	Change(in percentage)				
Last 1 month	27.6	38.5	40%				
Upto 7 days	24.3	30.6	26%				
Upto 3 days	20.8	24.1	16%				
Yesterday	17.2	17.3	0.6%				
Source: IPS 2017							

According to the Indian Readership Survey 2017, there has been a tremendous rise in readers of newspaper dailies from 2014 to 2017, with 40% growth. There is massive growth in both Hindi and regional dailies from 2017 to 2019, around 9.6 %. English newspaper has grown around 10.7 % during the same period. There is Hindi dailies' dominancy in the print publication with almost 90% shares, and the remaining 10% is for vernacular dailies.



The leading regional players are D B Corp Ltd., Daily Thanthi Pvt. Ltd., Divya Prabhat Publications Pvt. Ltd., Express Publications (Madurai) Pvt. Ltd., Hindustan Media Ventures Ltd., Jagati Publications Ltd., Karnataka News Publications Pvt. Ltd., Ushodaya Enterprises Pvt. Ltd., Times V P L Ltd., Suddimoola Publishers (India) Ltd., Rashtra Deepika News Corpn. Pvt. Ltd., Printers (Mysore) Pvt. Ltd., Newsmen Associates Ltd.etc.The national players are Asian Age (West) Ltd., Bennett, Coleman & Co. Ltd., Business Standard Pvt. Ltd., Deccan Chronicle Holdings Ltd., H T Media Ltd., Indian Express Pvt. Ltd., Indian National Press (Bombay) Pvt. Ltd., Times-Journal India Pvt. Ltd.

The given figures of RM\_Int, comp\_int,selling\_int, Pbt\_int are raw material and stores and spares, compensation to employees, selling and distribution expenses, profit before income tax, and depreciation. The average value of these variables is normalized by dividing total income to get performance indicators.

## FINDING

Regional players saw a declining trend in both raw material and expenses from 2015 to 2019 and a parallel trend in both compensation to employees and selling and distribution expenses. Operating profit continues to fall an upward trend while the opposite is exact for the National players. Their operating profit rises till 2016 and saw a declining trend thereafter. The compensation to employees for national players saw an upward trend from 2015 to 2019. It is quite clear that regional players saw growth in the newspaper industry with a rise in operating profit. Their focus is on growing operating efficiencies, which gives some sense that

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they might have to charge low newsprint prices. They save on raw material cost and selling and distribution costs—however, the primary worry for national players to save on raw material cost and compensation to employees. Operating profit saw a marginal growth till 2016 and saw a declining trend after that. It can be inferred that there is a hidden market competition between national and regional players.

#### COMPETITION IN THE NEWSPAPER INDUSTRY

Market competition varies across countries. For example, the US newspaper market is characterized by "one city, one paper," where the regional players often collude due to multimarket contacts in the industry. In contrast, the structure of the Indian market is highly fragmented. There is a broad diversity in terms of languages, genre, and cover prices. Broadly the market is segmented into National daily and vernacular daily like Hindi, Marathi, Telegu, Gujarati, and many other languages.

Various studies have been done to model the newspaper market competition. In the US newspaper market study, multimarket contact among the newspaper chains is found to be the primary reason behind the market collusion. The study assumes home market circulation demand to depend on prices of both the home market and its competitors, the number of pages printed, the number of contacts through market chains, and other electronic media variables like TV, radio, and others. Being a part of MMC (Multi market contacts), firms get the advantage of the network effect and get a vast pool of common readership to charge advertisement premium. (W. Wayne Fu,2003). A study in the Australian newspaper market analyses the firms' strategies and the underlying market competition causes. It analyses cover prices decision of market leaders to understand the stability in prices resulting from market power. (Merrilees,1983). Another study models the radio industry competition and shows that free entry in the market leads to excessive entry and social inefficiency. (Berry&Waldfogel,1999).

#### **MODEL FRAMEWORK**

Newspaper firms often compete in market-circulation and advertising dollars. It is interesting to see how firms decide to increase the number of products to prevent competitors' entry. This paper attempts to build a model for Newspaper entry and market competition. Free entry in the newspaper market can lead to an excessive variety. For example, leading newspapers like The Hindu launching a Tamil edition, Times of India launching a Gujarati edition Nav Gujarat Samay, and Dainik Bhaskar's entry into Patna.

The analysis is based on Vickrey's circular city model (1964) and made famous by Salop (1979). The model predicts that firms' costly attempts to differentiate themselves are wasteful from a social perspective. The newspaper market requires a substantial fixed cost, which is a printing machine and other equipment. The primary assumption is that location is endogenous as the players choose their market location themselves. There is also a free entry in the market, which means long term equilibrium price is equal to the marginal cost plus the square root of the transportation cost multiplied by the fixed entry cost. When the firms engage in product differentiation with high fixed entry costs, there will be too much entry than the social optimum (brand proliferation strategy).

#### CONCLUSION

The study finds that there is a massive growth in regional players from 2015 to 2019. A rise in operating profit can be contributed to the growth. In contrast, the national players saw a declining trend in the operating profit. The market model suggests that there is an excessive entry of regional players in the Indian Newspaper market. There are massive market opportunities and growth in the Indian newspaper industry.

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