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## Research Article

# FINANCING HIGHER EDUCATION IN THE CASHLESS ECONOMY: CHALLENGES AND PROSPECTS

Mohammad Allam

Post Graduate Teacher S.T.S. School (Minto Circle) A.M.U. Aligarh

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### ABSTRACT

The massive effort of the present government of India for bringing a cashless economy has made restless to a large number of the people and various sections of the country. A section of people is doubtful, while other groups are hopeful for the cashless economy. This situation has led the debate and discussion on the utility of the cashless economy.

The higher education of India is the third largest in the world after USA and China. With more than 900 universities and more than 35000 colleges, the financial management of the institutions of higher education in India is important and needs special attention. The financing of higher education should be smooth for qualitative and quantitative advancement. What are the challenges in the financing of higher education in the cashless economy? What are the advantages of higher education in the cashless economy? These are some questions which the present paper has tried to find the answer in the context of India.

The present paper is important to understand the challenges and prospects of financing of higher education in India. This study would be helpful to all the stakeholders of higher education in India and the world. This study will be an addendum in the financing of higher education in the cashless economy.

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## INTRODUCTION

Many countries around the world have opted for the cashless economy to curb the corruption and hoarding of black money by bringing transparency in the financial transaction. India, being one of the largest economies of the world, has opted for the cashless economy too. A cashless economy is an economy with no physical currency in circulation or in other means an economy which has been digitalized. A cashless economy is defined as "functioning, operated, or performed without using coins or banknotes for money transactions but instead using credit cards or electronic transfer of funds".<sup>1</sup> The main objectives of bringing a cashless economy are to end corruption; end major source of funding of terrorism and discourage the hoarding of black money. With these three major objectives, the Indian Government demonetized Indian currency of Rs 500 and Rs 1000.

What is the status of cash transaction in India? As per the report of Boston Consulting Group (BCG) and Google India," last year around 75 percent of transactions in India were cash-based, while in developed nations such as the US, Japan, France, Germany, etc. it was around 20-25 percent."<sup>2</sup>

The effort of the government for a cashless economy brought both positive and negative response from the people of all walks of life. The experts of own field started to analyze the pros and cons of the cashless economy on their field.

Indian education sector particularly higher education is one of the important sectors of the Indian economy. It is also the engine of the economy in the field of knowledge creation, research and innovation. Indian higher education is the third largest in the world after the USA and China with \$ 100 billion worth. The main provider of higher education in India is the public sector. But in recent time, the private sector advanced rapidly in higher education both in term of enrolment of the students and the establishment of institutions of higher education. The expanding higher education which enrolling more and more students, the building of infrastructure for higher education and maintaining the old institutions of higher education make the area of financing higher education important.

Financing higher education is remaining a matter of concern for the government, people and agencies working in the field of higher education. In a cash king economy, the financing of higher education led to the emergence of a complex system.

\*Corresponding author: **Mohammad Allam**

Post Graduate Teacher S.T.S. School (Minto Circle) A.M.U. Aligarh

The present financing is engulfed with the large scale corruption, place of hoarding of black money, the rise of educational mafia and evading the social responsibility resulting from the degradation of the quality of education and bottleneck in formulating an effective educational policy. How a cashless economy would affect the financing of higher education? What would be challenging in financing higher education in a cashless economy? What are the prospects for financing higher education in a cashless economy? The present paper has studied the financing of higher education in a cashless economy.

The previous studies related to challenges and prospects of a cashless economy are making to look possibility related to financing higher education in a cashless economy. The study of Panchal & Garg (2017) explores the benefits and challenges of a cashless economy. In their study they reached on the conclusion that many people actually agree with the government on the usefulness of cashless economy as it helps to fight against terrorism, corruption, money laundering but one biggest problem in the working of cashless economy in India is cybercrime and illegal access to primary data.”<sup>3</sup> In spite of these challenges the study of Sharma (2017) shows that there “is great and optimum potential for making India digital and cashless.”<sup>4</sup> Her finding is based on a survey which shows the increasing number of the user of digital or virtual banking. While the study of Rajanna (2018) shows the numerous challenges in the way of cashless economy. He enumerated eleven challenges in which the challenges of “Cyber Security”, “Network Connectivity”, “Internet Cost”, “Charges on Cards Online Transactions”, “Non-Tech-Survey” etc. are important <sup>5</sup> Can a cashless economy make financing higher education possible? The study of Jain (2017) <sup>6</sup> which studied the impact of cashless option from the side of the colleges, Parents-Student and administration and found that rural students face less easiness in cashless system than urban; Parents of Government colleges face less easiness in cashless transaction than private colleges and administration of government colleges feel more easiness in cashless system than the Private colleges. On the basis of the above studies the present study is an extension and studies the possibility of financing higher education at macro level theoretically.

**The objectives of this study are**

1. To study the status of higher education
2. To study the financing of higher education
3. To Study the challenges in financing higher education
4. To study the prospects of financing higher education

**Research Question**

**In the light of the above Objectives the Research Questions are**

1. What is the status of higher education?
2. What are various aspects of financing higher education?
3. What are the challenges in the financing of higher education?
4. What is the prospect of financing higher education?

**Methodology of the Study**

The present study has used Qualitative research design with descriptive method. The data is secondary in nature and collected from the Journals, Books, Website, Various

departments of the Government, articles, etc. The present paper has developed the subjects by dividing the paper into four major parts. The *first part* has studied the status of higher education in India. In *the second part*, the paper has taken the aspect of financing of higher education in India. In *the third part*, the paper has studied the various challenges of financing higher education in India. As the cashless economy is still not fully operational zed so, the problems of financing higher education have been discussed theoretically and in the background of the experience from other nations. The paper has explored the financing from the point of available data. The *fourth part* of the paper is about prospects of financing higher education in a cashless economy.

**Higher Education of India at a Glance**

Higher education in India is the third largest in the world. The higher education in India starts with the passing of Higher Secondary or Senior Secondary School Certificate in Technical or Non-Technical or Professional courses. As regards to enrolment in higher education, the Table-1 shows the number of enrolment from 2011-12 to 2015-16.

**Table 1** Number of Enrolment in Higher Education in India

	Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
Male	161,73,473	166,17,294	174,95,394	184,88,619	185,94,723
Female	130,10,858 (45%)	135,35,123 (45%)	148,40,840 (46%)	157,23,018 (46%)	159,90,058 (46%)
Total	291,84,331	301,52,417	323,36,234	342,11,637	345,84,781
Male(GER)	22.1	22.7	23.9	25.3	25.4
Female(GER)	19.4	20.1	22	23.2	23.5
Total(GER)	20.8	21.5	23	24.3	24.5

Source: AISHE, MHRD & FICCI

The Table-1 shows that the enrolment in higher education has been increased both in term of enrolment and Gross Enrolment Ratio (GER). The number of enrolment of the female is less than male in term of GER too.

What is the status of the number of Institutions of higher education in India? The Table-2 gives information about the number of institutions in India.

**Table 2** Number of Institutions of Higher Education

Name of the Institution	Years				
	2011-12	2012-13	2013-14	2014-15	2015-16
Universities	642	667	723	760	799
Colleges	34,852	35,525	36,634	38,498	39,071
Stand Alone Institutions	11,157	11,565	11,664	12,276	11,923

Source: MHRD, GOI

The Table-2 shows that with the passage of time, the number of institutions has increased but not increased as per the ratio of increasing demand. As a result, the number of enrolment has not increased as desired by the policy maker and the government.

In term of the total teaching faculty members, the Table-3 shows the actual position in the institutions of higher education. As per an estimate, a major portion of the budget of higher education is incurred on the salary of the teaching faculty. So, point of view of financing it is very important to see the number of teachers in higher education so the expenditure can be managed wisely.

**Table 3** Number of Teachers in Higher Education

Name of the Teacher	Gender	Years				
		2011-12	2012-13	2013-14	2014-15	2015-16
Professor and	Male	76,133	88,543	93,334	1,02,822	1,08,277
	Female	26,605	31,613	32,004	34,144	37,744
Equivalent	Total	1,02,738	1,20,156	125,338	1,36,966	1,46,021
Reader & Associate Professor	Male	1,15,391	1,16,87	1,19,671	1,16,319	1,13,830
	Female	58,874	59,585	63,010	61,280	60,827
Professor	Total	1,74,265	1,76,402	1,82,681	1,77,599	174,657
Lecturer/Assistant	Male	5,12,142	5,26,755	5,48,752	5,99,593	612,615
	Female	3,40,752	3,50,801	3,63,426	3,85,492	3,96,581
Professor	Total	8,52,894	8,77,556	9,12,178	9,85,085	10,09,196
Demonstrator/Tutor	Male	21,151	23,046	25,433	30,238	30,645
	Female	28,013	31,562	33,113	41,419	46,288
Temporary Teachers etc	Total	49,164	54,608	58,546	71,657	76,933
Temporary Teachers etc	Male	36,287	42,465	46,970	55,074	59,598
	Female	32,105	37,384	4,822	46,874	52,408
	Total	68,392	79,849	88,792	1,01,948	1,12,006

Source: MHRD, GOI

The Table-3 shows that the numbers of teachers in all categories have increased. In the category of Professor and Equivalent, the number of post in 2011-12 was 1, 02,738 which rose to the 1,46,021 in 2015-16. In the category of Reader and Associate Professor the total number in 2011-12 was 1,74,265 which rose to 174,657 in 2015-16. In the category of Lecturer and Assistant Professor the total number was 8,52,894 which rose to 10,09,196 in 2015-16. The largest number of teaching faculty in higher education is of Lecturer & Assistant Professor. The number of Temporary teachers was 68,392 in 2011-12 which rose to 1, 12,006 in 2015-16. This category of teachers increased more than any other categories of Teachers. One of the important parameter to see the qualitative higher education system is the Pupil-Teacher Ratio (PTR). And also to look at the prospect to improve it by appointing more and more teachers. As per the data, the PTR in higher education is above 20 which is more than any other the best ranking institutions of the world like Oxford, Cambridge, Harvard, etc. The Table-4 gives the information on PTR in higher education in India.

**Table 4** Pupil-Teacher Ratio (PTR) in Higher Education of India

Name of the Institution	Nature of the Course	Years				
		2011-12	2012-13	2013-14	2014-15	2015-16
All Institutions	Regular and Distance Mode	23	23	24	23	23
	Regular Mode	21	20	21	21	20
University and Colleges	Regular and Distance Mode	24	24	25	24	24
	Regular Mode	21	21	21	22	21
University and Its Units	Regular and Distance Mode	42	41	41	37	37
	Regular Mode	16	16	16	15	16

**Source**

The Table-4 shows the PTR in all categories of Institutions of higher education. The PTR is higher in Regular and Distance Mode than Regular Mode. And the reason behind is the non-availability of face-to-face teaching in Distance Mode.

A qualitative system of higher education is important to attract a large number of foreign students. The qualitative teaching and less cost of higher education are two important factors for attracting a large number of foreign students. The Table-5

gives information about the foreign students in India as the government has to incur the sum on education.

**Table 5** Number of Foreign Students in Higher Education

	Years				
	2011-12	2012-13	2013-14	2014-15	2015-16
Male		21,852	25,565	27,889	30,151
Female		12,922	13,952	14,404	15,273
Total		34,774	39,517	42,293	45,424

**Source**

Table-5 shows that the number of foreign students has increased over the years. In 2012-13 the number of foreign students was 34,774 which rose to 45,424 in 2015-16. The majority of students are mostly from the third world particularly from Africa, Asia, etc. This is not a match to Indian students' uses to go abroad for study and their numbers are about 8 lakh.

**A look on Financing of Higher Education**

Financing higher education simply refers to the financing of various activities of higher education. Financing higher education is important for the development of higher education. It looks at the revenue and expenditure side of higher education. Education is considered as a public good or Quasi good. So, the responsibility of providing education mainly lies with the government. This is related to all types of education ranging from elementary to higher education. In India, the providing of education mainly lies with the government. The Central Government, the State Government, the local government not only manage and administer the education in India but also finance the education.

How much fund is needed for providing higher education to Indian? According to Aggarwal(2006) " with a view to estimating the overall requirement of funds for higher education, an average unit cost of Rs.60000 per annum per student is taken. Based on this norm, for enrolment of 10.48 million, an annual expenditure of Rs.628.8 billion is desired on higher education in India"7 While Tilak (2004) argues that with the increasing opportunity the per unit expenditure of higher education has gone down over the years.8

Sharma (2008) states that the expenditure on higher education in term of GDP declined: "The Union Government share in the total government expenditure on higher education in India fell from 20.57 percent in 1990-91 to 16.71 percent in 1996-97. It rose to over 26 percent in 1998-99 and 1999-2000 and again fell down to 19 percent in 2003-04"9. As a percentage of the GDP, the government expenditure on higher education was 0.46 in 1990-91 which decreased to 0.37 in 2003-04" 10

**Sources of Financing Higher Education:** There are various sources of financing higher education in India. The main source is public source coming from the center, the state, and the local bodies. The other sources from Non-governmental are philanthropist agencies, Individual households, and corporate investment.

In the case of higher education the government mainly bore the cost of higher education from Independence and which is increasing. According to Rani "Reliance on government for

resources has almost double that is from 49.4 percent in 1950-51 to 75.9 percent in 1986-87. On the other hand, fee income has drastically declined from 36.8 percent to 12.6 percent during the same period. Other sources contributed around 10 percent throughout the period. After the liberalization and privatization of the economy, the burden of financing higher education started to shift towards the private institutions. As it was assumed that the social return of higher education is less than the rate of return to Individual (Tilak-2005). Since 1991 the role of the private sector in higher education has been increasing in term of the enrolment, institutional built up and investment. The expenditure of the private sector has increased as per Aggarwal (2006) up to 50 percent in the post-liberalization period. The Table-6 shows the share of the center and state in Higher education. It further shows the expenditure in the ratio of Gross Domestic Product to see the priority of the government.

**Table 6** Expenditure (Revenue) on Higher Education by Education and Other Departments

University and Higher Education	Expenditure on Education (Rs Crores)			Expenditure as % of GDP		
	Sates/UTs	Centre	Total	Sates/UTs	Centre	Total
Expenditure Year 2011-12 Revised	34845.7	19055.81	53900.98	0.40	0.22	0.62
Estimate Year 2012-13 Budget	40370.74	19673.17	60043.91	0.41	0.20	0.60
Estimate Year 2013-14	45571.69	25567.34	71139.03	0.40	0.23	0.63

Source: Analysis of Budgeted Expenditure on Education from 2011 to 2014; MHRD, GOI

The Table-6 shows the expenditure (Revenue) on higher education. The data have been taken from the Budgets and analyzed as per the requirement of the study. It has been found that expenditure on higher education is not as per the requirement. In term of overall expenditure in Rupees and GDP, the expenditure does not cross the conventional line.

Another way to look expenditure is to see in term of Plan and Non-Plan as the Budget uses to earmark the expenditure on various sectors of the economy. The Table-7 gives information about the Plan and Non-Plan expenditure on higher education.

**Table 7** The Budget Allocation for the Department of Higher education ((In crores of Rupees)

Actual 2014-2015			Budget 2015-2016			Revised 2015-2016			Budget 2016-2017		
Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
12574.75	10577.73	23152.48	15855.26	11000.00	26855.26	14428.00	10971.00	25399.00	16500.00	12340.00	28840.00

Source: MHRD, GOI

In the budget of 2016-17, the total budget for higher education is Rs 7996.84 Crores in which there are Rs 2126.50 Crores in Plan and Rs 5870.34 Crores in Non-Plan .12

What is the status of expenditure on higher education during various Five Year Plans? The Table-8 gives the information on the Plan expenditure in term of total expenditure on higher education in the ratio of total expenditure on education.

**Table 8** Government Expenditure on Higher education

Name of Plan	Period	Plan Expenditure on Higher Education in Million (Percentages of total allocation in education)
1st	1951-56	140(9%)
2nd	1956-61	480(18%)
3rd	1961-66	870(15%)
4th	1869-74	1950(25%)
5th	1974-79	2050(55%)
6th	1980-85	5590(22%)
7th	1985-90	12010(16%)
8th	1992-97	15160(8%)
9th	1997-2002	25000(12%)
10th	2002-07	(9.5%)
11th	2007-12	(15.5%)
12th	2012-17	1,10,700

Source: Planning Commission

The Table-8 shows the share of higher education expenditure during various plans period. The allocation for higher education ranges from 9% to 55% of the total outlay for education. To make the picture clear, there is a need to see the expenditure on various levels of education. What is the expenditure status of various sectors of Education? The Table-9 gives the Budgeted expenditure on education from 2001-02 to 2013-14.

**Table 9** Expenditure on Various Level of Education

	Elementary Sector	Secondary sector	University and Higher education	Technical education	Others sector including adult, etc.
2001-02	50.91	33.80	11.34	2.32	1.64
2002-03	49.12	34.91	11.95	2.42	1.59
2003-04	49.57	34.95	11.61	2.28	1.59
2004-05	51.45	30.13	11.67	3.82	2.93
2005-06	46.56	25.80	19.31	7.96	0.89
2006-07	45.17	23.27	19.30	11.98	0.28
2007-08	44.62	22.98	24.47	7.67	0.26
2008-09	42.47	24.24	24.30	8.79	0.20
2009-10	39.63	25.87	23.59	8.91	2.0
2010-11	42.09	24.31	21.34	11.95	0.31
2011-12	44.66	25.62	16.14	13.28	0.30
2012-13	45.21	25.19	14.70	14.62	0.28
2013-14	44.59	24.86	15.29	14.95	0.31

Sources: Calculated from Analysis of Budgeted Expenditure on Education, MHRD, GOI

The Table-9 shows the expenditure on various levels of education by the government. Among all the sectors of education, the highest outlay of expenditure is for the Elementary level followed by Secondary and University and Higher levels of education. The percentage of University and Higher education ranges from 11 percent to 24 percent of the total outlay of education. What is the household expenditure on higher education in India? There are many estimates of household expenditure on higher education. The Table-9 gives information about the household expenditure on higher education.

**Table 10** Percentage of spending on higher education for households who have at least one member in higher education

Region	Rural	Urban	Total
Northern	14.31	16.23	15.15
North East	13.45	16.93	14.53
Eastern	14.26	16.46	15.13
Central	11.32	16.52	13.18
Western	14.95	18.04	16.76
Southern	22.28	21.75	22.01
All India	15.29	18.36	16.66

Source: <http://www.igidr.ac.in/pdf/publication/WP-2016-030.pdf>

(S Chandrasekhar, P. Geetha Rani, Soham Sahoo Calculation from NSSO's 71st round (2014) data on Education)

The Table-10 shows that there is no big difference in household expenditure in rural and urban areas. Among the region, the highest expenditure is of Southern India both for rural and urban areas while the lowest expenditure of rural is from North East and from Urban is Northern area.

To make the picture clearer there needs to see household expenditure minutely. The Table-11 gives the information of per capita household expenditure along with total household expenditure on higher education.

**Table 11** Per capita annual expenditure on higher education and household's total annual expenditure

Region	Per capita annual expenditure on higher education	Rural		Per capita annual expenditure on higher education	Urban	
		The average annual expenditure of all households	Share of per capita higher education expenditure in total household expenditure (%)		The average annual expenditure of all households	Share of per capita higher education expenditure in total household expenditure (%)
Northern	25,143	106,879	24	41,487	1,74,709	24
North East	17,718	77,112	23	29,249	1,28,882	23
Eastern	19,035	66,244	29	36,068	1,17,465	29
Central	11,873	72,149	16	35,697	1,31,865	27
Western	21,787	89,961	24	45,436	152,018	30
Southern	36,063	83,602	43	49,690	1,29,597	38
Total	21,735	79,202	27	41,991	1,38,734	30

Per capita annual expenditure on higher education is calculated considering students enrolled in higher education

Source: S Chandrasekhar, P. Geetha Rani, Soham Sahoo calculation from NSSO's 71st round (2014) data on Education The Table-11 shows the per capita, average and share of per capita in the household expenditure of both rural and urban areas. In the rural area the higher per capita annual expenditure is of Southern India and the lowest is of Central India. In average the highest is of Western India and the lowest is in Central India. In term of Share of per capita higher education expenditure in total household expenditure in percent the highest is of Southern India and the lowest is of central India.

In the urban area the per capita annual expenditure is the highest of Southern India and the lowest is of North East India. The Average annual expenditure of all households is the highest in Northern India while the lowest is of Eastern India. In term of Share of per capita higher education expenditure in total household expenditure in percent the highest is of Southern India and the lowest is of North East India.

**Challenges in Financing Higher Education in the Cashless Economy**

With the announcement of the government for making the Indian economy a cashless economy, there have been emerged many challenges to the financing of higher education. Whatever the policy of the government was for the last 65 years for financing higher education, that was of cash king economy. The cash was available and people were spending on will with little transparency. As per the data of RBI (on 8 November 2016) Rs 17, 54,000 Crores currency were in circulation.<sup>13</sup> As per the report of Times of India (March 10, 2017) as the Parliament reported the circulation amount of currency in post demonetization was 11.73 Lakh Crores.<sup>14</sup> In a country of billion people and circulation of the huge amount of currency to make India a cashless economy is not an easy task.

Yet, for the national interest to curb the black money and increase the tax of the nation, the cashless economy is an essential tool to bring transparency in economic activities.

In case of financing higher education which deals with huge currency transaction connecting people from various remote areas, the digital transaction of money is not easy. There is no doubt that major financing player of higher education is the government yet after 1991 the corporate sector started to expand its operation in the educational sector particularly in higher education.

The household source which is going to bear more and more burden of paying the cost of higher education would become complex. The total share of higher education in household expenditure has increased up to 30%. And to channelize this source is not an easy task.

**In Making Financing Higher Education Possible and Smooth in a Cashless Economy there are the Following Challenges**

The first and foremost challenge is to make people accept the digital payments or other than physical forms of the currency. The various stakeholders of higher education like the government, institutions, faculty members, Industry, students, etc should end the reluctance and have to accept the cashless economy. One of the important reasons in the reluctance of digital payment is the fear of the people of disclosing their income and the action of the law enforcement agencies. Large numbers of the people, about 25% (2011) are illiterate. There would be a problem for them in accession. while due to some other problems like taxation, they are unwilling to connect in any drive for digital payment.

There is a large number of students approximately 29 million who are enrolled in higher education; there are more than 799 (currently more than 900) Universities and more than 35000 colleges which are providing higher education; and more than 1.5 million faculty members. This is a very huge task to connect all of them with a digital transfer network of the country.<sup>15</sup>

There are various sources of financing higher education. Among the sources, the public sources can adopt the digital mode of transfer but other sources like corporate sector and the traditional sources like the money lender would not feel comfortable to be a part of the cashless economy as their

motive to evade the tax to the government would not be successful. As per the data, only 3.8 % of Indian uses to pay taxes to the government. 16 While the development of corporate-owned higher educational institutions is very fast both in terms of enrolment and investment. According to an Aggarwal(2006) “nearly 50% of the higher education expenditure comes from private sources” 17

Challenge of digital infrastructure for payments to the government, Institutions, and students are another important area of concern in financing higher education. As per the data provided by PEW research only 22 percent adult uses the internet in India as compared to 94% in South Korea,93% in Australia,90% in Canada, 89% in the USA and 88% in the UK. Only 17 % Indian owned smartphones,61% has a cell phone and 22% are without any cell phones and 34% uses the internet occasionally while the use of internet of the citizen from Canada, Italy, Spain, and South Korea is 100%. The use of internet in India increased 06 percent only between 2013-15. In India, 42% uses the internet for several times in a day,20% in once a day and 27 % in a week which is much lower than Australia, Canada, Italy, USA, Lebanon , Israel, etc. In the gender term, 17% of women and 27% of men use the internet. 18

Ideological differences of the political parties in the formulation of educational policy are also one of the challenges. If any political party which is under influences of the corporate sector or international educational provider then the policy would be not the same as the policy made by the pro-people political parties. Politically, the approach towards higher education has been changing as there has been found a shift in the expenditure of higher education from the government to the individual. The individual rate of return of higher education is higher than the social rate of return as many economists believe so, there is a need to shift the cost of higher education from the public to the individual.

The Monetary policy of the financial institutions like charges on withdrawal, rate of interest, educational loan, are important for facilitating smooth financial transaction. The role of Banks is important in a cashless economy. But with the passage of time, the banks are changing their role from the socialistic service to the capitalistic service. With the strengthening of the market economy in India, banks have started to change their approaches towards the people. Connecting to over 29 million students and 1.5 million faculty members and more than 40,000 institutions of higher education is not an easy task. The mobility of a large number of students is another challenge for the banks in the handling of the accounts. Banks provide an important role in promoting higher education by providing educational loan to the students to pursue an education in India or abroad. As per one notification of RBI which states that "Based on the recommendations of the Study Group, a comprehensive model educational loan scheme was prepared by the Indian Banks' Association for adoption by all banks. The Scheme aims at providing financial support from the banking system to deserving/meritorious students for pursuing higher education in India and abroad." 19

The challenges of the cashless economy can be summarized from the World Bank Report (2014) entitled as "The Opportunities of Digitizing Payments" enumerates the numerous challenges of digital payment. Among these

challenges from supply and demand sides are "Safety and reliability, Interoperability of bank and nonbank financial service providers, Physical infrastructure, Increasing cash-out points, Sticky prices, Building a digital ecosystem, Political economy issues, Product design, Consumer education, Usage of accounts and Gender disparities in mobile ownership".20

### ***Prospects of Financing Higher education in Cashless Economy***

There is no doubt that there are so many challenges in achieving a cashless economy. Yet, the prospect for a cashless economy is bright and will bring transparency in the economy. And in the long term the whole economy will be revolutionized. For a powerful economy, the tax realization is important and the cashless economy will bring more taxes.

On the question of a cashless economy, there are both positive and negative views. Some economists believe that in such a vast and populated country with less digital infrastructure, the cashless economy is an uphill task. As per a report by Hindustan Times (Nov.30, 2006) 10 million accounts had only Rs-1 as a deposit. Out of 95 million Rupay Cards, only 33% are in use; in 2014 there were 13 commercial bank branches and 18 ATMs per 100,000 adults;26% have internet access and only 200 million were using digital services." 21 As per The World Bank's Global Findex shows that less number of people are familiar with digital banking. 22

There so many advantages of the cashless economy that the government would try to work for the digital economy. If the government comes with the suitable legislation which not only protects the interest of the people but also the powerful classes, then there is no doubt that this cashless economy would be possible. As per the World Bank Report (2014) there are many advantages of digital payment such as "Lower costs, Increased control on money , Increased incentive to save, Increased risk management , Improved speed and timely delivery, Increased security, Increased financial inclusion, Increases in women's economic participation and empowerment and Increased credit information and fewer nonperforming loans" 23

***Digital Infrastructure:*** with the passage of time, the accessibility of Indian to financial institutions and internet and electronic gadgets has increased. Both the government and the people are adopting and accepting the digital mode of transaction. With the increasing literacy and advancement of computer and information technology, financial inclusion has increased. As per the data, there are 254.5 million credit cards and 666.8 million debit cards as on March 2016; between March 2015 to March 2016 about 0.38 million credit cards and 3.44 million debit cards added: the number of transaction from Credit card increased to 27% and 48 % from Debit cards.24

With such an increasing rate of development of digital infrastructure, institutions of higher education would also adopt the digital payment too. The instruction of the government to the administration of higher education to adopt a digital mode of transaction is another advantage. The only need is to connect all the stakeholders with a centralized digital system of payment.

The directives of the government to use the Aadhar card and the PAN card in all payment would force the people to adopt the digital transactions. There is a problem in connecting the

private institutions of higher learning in the digital system of transactions but not with the government. But with suitable legislation, this problem would be solved in the future.

**Changing world scenario and Internationalization of Higher education:** with the increasing use of technology and less use of cash in advanced economies of the world; the problem of financing of terrorism and use of a preventive mechanism to protect the financial system, the world financial system has become very vibrant and strong. Being one of the leading economies of the world, India has to move along with the world economy. In the case of higher education, there is a significant presence of Indian students in major countries of the world. As per the report of ASSOCHAM “nearly 6.8 lakh Indian students studying abroad costing India about \$6-7 billion (approx. Rs 50,000 crore) annually”.<sup>25</sup> This huge amount needs a better system of payment for better opportunities to the students studying abroad.

**The youth of India-A Hope:** India’s hope for better future lies on the shoulder of the youth. India is a country of youth. “By 2020, the average age in India will be 29 and it is set to become the world’s youngest country with 64% of its population in the working age group.”<sup>26</sup> A large number of Indian youth are tech savvy. The GER in higher education is about 29 million. As per the report of Mobile Association of India (IAMAI) and consultancy firm KPMG, the number of mobile internet user increased from 110 million in 2013 to 314 million (Projected) in 2017 and internet user from 189.6 million in 2013 to 503 million (projected) in 2017.<sup>27</sup>

Thus India can move and achieve the cashless economy in the future.

## CONCLUSION

The financing of higher education in a cash king economy is complex and in a vastly populated country very challengeable as a quasi-product the higher education cost has to be borne by the government while the rate of return of higher education uses to go into the account of individuals. With only 3.8% of taxpayers, the management of the expenditure is an uphill task. The people are not coming forward to bear the cost of higher education. In a cash king economy due to lack of transparency, the government also cannot find the people and force them to pay the cost of education. The demand for the economy for better and high-quality human resources is not possible without high expenditure.

There is a doubt that India cannot be a fully cashless economy in short time due to lack of digital infrastructure, people will and demand of economy but once it would it will bring a drastic change in the financing of higher education. These changes would be transparency, shifting of burden from Government to Individual, new sources of financing and more control on black money hoarded in educational institutions. No doubt the financing of higher education would be challenging but fruitful.

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