BANNING OF HIGH VALUE CURRENCIES, BS-III AND ITS IMPACT ON INDIAN AUTOMOTIVE INDUSTRY

COMMERCE

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ABSTRACT

The study explains the demonetization in India and its impact on Indian Automotive Industry and explains the Bharat Stage – III to Bharat Stage –IV transformation. The Government of India demonetized the high value currency i.e., 500 and 1,000 currency notes. The withdrawal of the 500’s and 1,000’s currency notes got significant impact in general, as well as in automotive industry. During the period, the sales volume got reduced very much. Within three months the Supreme Court of India banned the production and sales of BS-III Vehicle for the welfare of environment. As per the automotive manufacturers point of view, it was the next attack on automotive industry. The initial step was taken by the Ministry of Environment and Forest. The Supreme Court of India strictly banned the BS-III automobile production and sales after 1st April 2017.

KEYWORDS

Automotive, BS-III, BS-IV, Demonetization, Environment, Production, Sales

Introduction:
The Government of India has announced the withdrawal of high value currency in the name of ‘demonetization’ and the Apex court of India banned the BS-III vehicle. Both the statutory policies are implemented within six months. These changes affected the whole economy the result shows adverse effect. Especially the automotive sector affected very badly. But the BS-III ban show positive impact as per the environmentalist point of view. Moreover peoples also understood and accepted the necessity for the environmental change. Here we can analyze the impact of demonetization and BS-III ban with different dimension.

Objectives:
1. To analyze the Demonetization impact on Indian Automotive Industry
2. To find out the impact of Bharat Stage – III ban and implementation of Bharat Stage-IV in Automobile Industry

Demonetization:
Demonetization is the law related to currency units withdrawal conducted by Government. The existing form of currency is getting back and new currency to be replaced. Some countries had the experience of demonetization. But almost all are failure. Examples are Zimbabwe, Botswana and South Africa.

Demonetization in India:
The Government of India has announced the withdrawal of Rs.500 and Rs.1000 banknotes of father of nation Mahatma Gandhi series on 8th November 2016. In this situation on 10th January 2017 Reserve Bank circulated new 500 and 2000 currencies. The Government of India already demonetized the currency on two times. First time in 1946 and the next was in 1978. Both the times the government has done the demonetization in the name of, “The demonetization is a war against black money”. In 1946, the British Government demonetized the currency. In 1978 the ruling Janata and its coalition party government demonetized the currency of Rs.1,000, Rs.5,000 and Rs.10,000.

Support, Criticism and Opposition for the Demonetization:
In 2012, The Ministry of Finance-Department of Taxation has already demonetized the currency on two times. First time in 1946 and the next was in 1978. Both the times the government has done the demonetization in the name of, “The demonetization is a war against black money”. But the new Governor signed in the currency notes (taken charge on September 2016). This is also a big criticism during that announcement.

Few weeks before demonetization, the official announcement was made by the Hindi daily ‘Dainik Jagran’ stating the upcoming 2,000 rupees currency and the withdrawal of 500 and 1000 currencies. Similarly the Hindi ‘Business Line’ on 21st October 2016 states the upcoming 2000 rupees, and the possibility of withdrawal of 500 and 1000 rupees notes. The chair person of the SBI has also spoken in April 2016 about the possibility of withdrawal of high value currencies.

The demonetization scheme got supported from International Monetary Fund, Chinese state media ‘Global Times’, Former Prime Minister of Finland, Vice-President of European Commission, BBC’s South Asia Correspondent, Forbes Magazine and Swedish Ministers. But many other had criticized and opposed the move. Because most of the demonetization schemes has been failures. The great Indian Nobel laureate economist Amartya Sen severely criticized the withdrawal of high value currency move calling it a “despotic action”. Similarly the former Senior Vice-President and Chief Economist of the World Bank, Kaushik Basu calling as “Major Mistake and damage is likely to be much greater than any possible benefits”.

In India the citizens are faced very much problem and panic. The Government was not allowed the public, to withdraw their own fund from banks. This is a peculiar case in the world. No Country has announced like this to stop withdrawal of their fund from bank. Almost all peoples are suffered. Very sound debates also held in Indian parliament. But the Government didn't respond. Various state governments opposed the demonetization and strikes conducted across the nation. Peoples are in almost distress especially those who belongs to informal sector. The Ex-Prime Minister Dr.Mamohan Singh said “This scheme will hurt small industries, the farming sector. The GDP can decline by about 3% due to this move”. Similarly the result shows the nation's industrial production and Gross Domestic Product growth rate was reduced.

Due to inefficient cash supply, the scarcity of cash to withdraw led to confusion and most of the public holding old useless currencies faced huge problems in exchange them in the bank. Almost all ATMs across nation were running out of cash after a few hours of being cash loaded. Peoples are always running between ATM to ATM, but not able to fulfill their needs. As per the Government report there is no death connected to demonetization. But the opposition leaders claimed that more than 100 died due to the demonetization.

General impact on demonetization:
In 28th October 2016 the total currencies circulation in India was 17.77 trillion rupees. The annual report of the Apex bank of India (RBI) of 31st March 2016 shows that, the total bank currency in circulation valued to 16.42 trillion rupees of which 86% (approximately 14.18 trillion rupees) were Rs.1,000 and Rs.500 currency. The unexpected announcement and the cash shortage had created too much disruption throughout the economy. The famous stock exchanges fell over 6% on the next day of the announcement. The Reserve Bank of India gave a time limit to exchange the old invalid notes in banks within 50 days, i.e., the demonetized currency should be deposited before 30th December 2016. Then the time for exchange limit various over some days. Nearly 97% of the currencies have been received by the banks i.e., a sum of 14.97 trillion out of 15.4 trillion as on 30th December 2016. At the end of August 2017 more than 99% of the banned currency had been deposited in the banks by the citizens. Remaining less than 1% currency i.e., 14,000 crore of the cash discarded. But the Government estimation was 3 trillion rupees. As per the Reserve Bank of India report released on August 2017 stated that, “The Government failed in its aim of purging black money for the economy”. A parliamentary panel presented a report on April 2017 shows that, “rural house holders and honest taxpayers were the worst hit by demonetization, and it was not just the poor that suffered, but the manufacturing sector was impacted too”. Based on the panel, the currency withdrawal scheme creates very big disruption throughout the nation’s economy because the Government didn’t conduct any prior study or research.

The next day of the demonetization, the stock exchanges faced sharp fall in BSE and NSE. BSE points reduced nearly 1689 and NSE points reduced over 541 points. The Indian agriculture sector is basically cash dependent sector. This sector affects adversely due to the demonetization. The delay in supply of the new currency, many farmers have insufficient cash to purchase fertilizers, pesticides and seeds for the plantation of rabi crops. The demonetization forced to unavailability of cash to pay for food products. The demand was reduced. It leads price fall in the crops market. The farmers are not able to get the basic costs of transportation from their farms to the market. They forced to sell their crops at very low price.

Peoples are aggressively shouting about the Government policies. At the time of demonetization Government declared as “War against Black money, Terrorism and Fake Currency”; but after that, Government insisted the citizens to go for digital transaction.

The GDP growth for the first quarter Jan-Mar 2017 was 6.1%, and the forecasted rate was 7.1%. The GDP growth for the fiscal year was 7.1% only, but the whole year forecast rate was 8%. This drop was due to the demonetization process. Similarly the next quarter April-June 2017 dropped to 5.7%, during the same period previous year (2016) the growth rate was 7.9%. This quarter was the lowest GDP growth since 2014. The fall in GDP growth was accurately predicted by Dr. Mannohan Singh in November 2016.

Due to demonetization there was a huge loss of job, especially in the informal and unorganized sector. But the number of IT returns fellings grew by 25% and the advance tax collection rose by 41.8% in 2016-17 year. The Government bodies are allowed to collect the tax amount in the denominations of Rs.500s and Rs.1000s. During that period large amount of tax have been collected by the municipal and local tax departments.

Due to the demonetization, the dividend paid by the Reserve Bank of India to the Union Government has reduced. The expected amount was 74.9 lakh crore, but actually received was just 30.7 lakh crore. So the ultimate result was fiscal deficit increased from 3.2 % to 3.4%. The Government’s expenditure program should be restricted and increase the revenue in the form of taxation is the only and only way to make adjustment.

After the demonetization there was a large sum of money thorn in temples in the name of donations. The Directorate of Enforcement raided several foreign exchange bodies, money laundering those who are using back dated accounting was carried by the co-operative banks, business unit and jewelers. The Ministry of Finance gave instruction to revenue intelligence bodies to join attack on Hawala, jewelers and Forex agencies. The PM directly coordinating the raids conducted by the Enforcement and Income tax and other revenue bodies. Due to this action huge amount of cash in the form of newly released currency notes were seized throughout the nation.

**Demonetization Impact on Automotive Industry:**

After the demonetization the circulation of currency was greatly affected, which has damage the cash dependent industries. Some of the sectors are Automotive, Real Estate and Jewelry. The industry experts says, ‘revenue for Auto ancillaries / components from cash dealing is nearly 75% and among Auto Original Equipment Manufacturers (OEMs), agriculture base vehicle, two wheelers are to get major impact due to the high level of dependence on cash for transaction.

Due to demonetization the commercial vehicles sales declined 11.6% in November 2016. It affected the Medium and Heavy Commercial Vehicles (M&HCV) area too declined by 19.1% on year to year basis. The upcoming quarter i.e. Jan2017 liquidity condition was better, during that tenure the sales rejuvenated. To boost the sales for vehicles in urban area automotive manufacturers along with the financiers have rolled out schemes without cash, 100% finance and tie-up with e-wallet partners.

### Impact on sales of Automobiles during Nov-2015 and Nov-2016

<table>
<thead>
<tr>
<th>Segment</th>
<th>Nov-2015 (Sales in No's)</th>
<th>Nov-2016 (Sales in No's)</th>
<th>% of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Wheelers</td>
<td>13,20,552</td>
<td>12,43,251</td>
<td>-5.85%</td>
</tr>
<tr>
<td>Three Wheelers</td>
<td>45,425</td>
<td>33,662</td>
<td>-25.9%</td>
</tr>
<tr>
<td>Light Commercial Vehicles</td>
<td>31,622</td>
<td>28,274</td>
<td>-10.59%</td>
</tr>
<tr>
<td>Medium &amp; Heavy Commercial Vehicles</td>
<td>20,144</td>
<td>17,499</td>
<td>-13.13%</td>
</tr>
<tr>
<td>Passenger Vehicles</td>
<td>2,36,664</td>
<td>2,40,979</td>
<td>1.72%</td>
</tr>
<tr>
<td>Total</td>
<td>16,54,407</td>
<td>15,63,665</td>
<td></td>
</tr>
</tbody>
</table>

Source: SIAM

During the period of December 2016 the lowest sales recorded in the last 16 years. The Society of Indian Automotive Manufacturers data shows the sales of automotive units dropped by 22% in December 2016 as compared to previous year (December 2015). This is the biggest sales drop ever since SIAM incorporation in 1997. In December 2015 the overall sales was 15.04 lakh units. But in December 2016 the sales was reduced to 12.21 lakh units due to the Severe financial crisis. This crisis forced the customers to postpone the purchase or reconsider the purchase.

Effect in rural area is very worst then urban area. Because the total economy was depends upon the agri sector. Already the farmers were in trouble and they are not in a position to plan for further big purchase such as tractors.

**Banning of BS-III and implementation of BS-IV**

The Supreme Court ordered that, the BS-III vehicles should not allowed the production and sales registration on or after 1st April 2017. Here after the automotive producers should produce BS-IV only. BS-III and BS-IV was nothing, but just air pollution level. Moreover the court has said “the health of the people is far, far more important than the commercial interests of the manufacturers or the loss that they likely to suffer”. Similarly some state Governments started to control seriously the environment protection (example Delhi Government – Delhi city affected very much).

The emission policy was introduced in 2000 and stage by stage conversion timeline and norm also given by the Central Pollution Control Board, under comes the control of the Ministry of Environment, Forest and Climate change. The Bharat Stage –IV standard were introduced in 2010 and it was only 13 cities in India. Later 1st April 2017 the standards were fully implemented the nation. The BS-IV vehicle will reduce the amount of harmful matter. Which is provide better and clean air. As per the manufacturers point of view the production cost is high, but as per the health point of view it is very much important.

Compared to BS-III trucks, the BS-IV trucks will emit less than 80% of smoke (air pollution). If the emission restricted the air pollution, the level of carbon monoxide, nitrogen oxide, black carbon and particulate matter by the air quality, it will be reduced. The first year air pollution will be reduced up to 3.33%, the next year level of air pollution level will reduce up to 16.33%. Similarly the upcoming year the air pollution level reduced up to 26.66%.
The particulate matter can affect the lungs. The molecules of hydrocarbon lead to irritation, reducing lung power and cough. The disturbance of oxygen supply, from brain and heart will be done by the carbon monoxide. The sulfur dioxide will lead great air pollution and it will affect serious risk to children further they may affect asthma. The emission can affect the blood stream and it will lead inflammation, further it will affect cardiovascular and neurological disease.

The norms for BS-IV emission level is equivalent to the European Euro standard. Some factors are just little bit different. The BS-IV standard affected the price of the vehicles. The petrol version vehicle cost increased from 20,000 to 30,000 rupees. Similarly the Diesel version vehicle cost increased from 75,000 rupees to 1,00,000 rupees. This pollution norm had changed the peoples mind to convert the purchasing option from diesel version to petrol version.

### The Emission norms for petrol vehicle:

<table>
<thead>
<tr>
<th>Emission Norms</th>
<th>Bharat Stage-III</th>
<th>Bharat Stage-IV</th>
<th>Euro-VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO (Carbon Monoxide)</td>
<td>0.64 g/km</td>
<td>0.50 g/km</td>
<td>0.50 g/km</td>
</tr>
<tr>
<td>HC</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NOx (Nitrogen Oxide)</td>
<td>0.50 g/km</td>
<td>0.25 g/km</td>
<td>0.06 g/km</td>
</tr>
<tr>
<td>HC+NOx (Hydrocarbons &amp; Nitrogen Oxide)</td>
<td>0.56 g/km</td>
<td>0.30 g/km</td>
<td>0.17 g/km</td>
</tr>
<tr>
<td>PM (particulate Matter)</td>
<td>0.05 g/km</td>
<td>0.025 g/km</td>
<td>0.005 g/km</td>
</tr>
</tbody>
</table>

Source: atlantahealthcare.in/blog/article/bharat-stage-iv-emission-standards

### The Emission norms for diesel vehicle:

<table>
<thead>
<tr>
<th>Emission Norms</th>
<th>Bharat Stage-III</th>
<th>Bharat Stage-IV</th>
<th>Euro-VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO (Carbon Monoxide)</td>
<td>2.30 g/km</td>
<td>1.00 g/km</td>
<td>1.00 g/km</td>
</tr>
<tr>
<td>HC</td>
<td>0.20 g/km</td>
<td>0.10 g/km</td>
<td>0.10 g/km</td>
</tr>
<tr>
<td>NOx (Nitrogen Oxide)</td>
<td>0.15 g/km</td>
<td>0.08 g/km</td>
<td>0.06 g/km</td>
</tr>
<tr>
<td>HC+NOx (Hydrocarbons &amp; Nitrogen Oxide)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PM (particulate Matter)</td>
<td>-</td>
<td>-</td>
<td>0.005 g/km</td>
</tr>
</tbody>
</table>

Source: atlantahealthcare.in/blog/article/bharat-stage-iv-emission-standards

The Bharat Stage VI standard is similar to be par with the Euro-VI, and the nation is looking to implement the BS-VI stage without touching BS-V. Actually the BS-VI initially planned to introduce in 2024. But the norms will be implemented in 1st April 2020.

Based on the CRISIL report, the two wheeler segment was affected very much. But the impact was not that much in some automotive units like Bajaj, Eicher and Yamaha. The reason was already they started BS-IV production from Jan 2017. Similarly the two wheeler market head Hero Moto Corp, Honda and TVS Motors also went BS-IV production. During the time of BS-III ban, the Automotive segment had stock of approximately 8.24 lakh units and 20,000 dealers were in trouble. The commercial vehicle inventory was nearly 0.96 lakh units, three wheelers vehicle inventory was nearly 0.40 lakh units, and the passenger vehicle inventory was nearly 0.16 lakh units. Here the two wheelers portion was nearly 6.71 lakh units and value was nearly 3,800 crore. During the period the total discount given to two wheeler customers were around 600 crore. Especially the two wheeler segment contribution was nearly 70% i.e., from 460-480 crore. The balance loss was accepted by the dealers. The value was around 150-200 crore. The Hero Moto Corp was affected very much.

The automotive components producers also have to make up gradation for BS-IV equipment. They have to reinvest some huge amount for the transformation. Overall the automotive manufacturers faced big problem, and the new environmental policy affected the inventory value of approximately 12,000 to 15,000 crore. And the estimated cost for up gradation will be Rs.1,500 crore to Rs.2,000 crore. Due to the changes in environment related automotive policy, the stock exchange also affected. The automotive sector was the great loser in BSE and the points stopped at 21842.60(The next day of the announcement 186.69 points reduced in stock exchange).

**Conclusion:**

The objective is removing black money from the economy and fight with terrorism and corruption. But after the report released the RBI in August 2017 (the Government failed in its aim of purging black money from the economy), the Government diverting the policy to digital money. Actually cashless transaction is not growth, just using the electronic machinery. How can we take this activity as growth? But The BS-IV is really a very good environmental policy. For the health of the citizens, the Ministry of Environment and Forest and Climate Change has decided to transform, all automotives from Bharat Stage-IV to Bharat Stage-VI. The demonetization and BS-IV conversion took huge problem in automotive industry.

But for the nation’s health, we have to protect our environment and to change our vehicles from Bharat Stage-IV to Bharat Stage-VI on 1st April 2020. The automotive manufacturers are planning to develop and implement a lean electronic fuel injection for three wheelers. This program will meet the required norms in the year 2020. Germany’s auto leader Bosch, American firm Cummins and many other popular leaders are trying to solve the issue. But the actual problem is not the technology. The real problem is not converting the engine technology. The technology is already there, but need time for the integration of system and optimizing as per the BS-VI.

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