DISCUSSION PAPER

THE ECONOMICS OF BANS

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1. Introduction

Good governance is synonymous to evidence-based policy making. Laws and legislations must be well reasoned and based on extensive stakeholder consultations, adequate research, and reliable data. Without this due process, regulations are merely knee jerk reactions, that are neither understandable nor sustainable. The incumbent government on several occasions has emphasised their commitment to good governance and ease of doing business.

Prohibition and bans have always existed in the Indian economy, but with muted success. As early as after independence, India introduced a complete ban on the export and import of gold. The stated objective behind this ‘Gold Control Policy’ (as it came to be known) was “To wean people away from gold, to regulate supply of gold, to reduce smuggling, to reduce the demand for gold and to reduce the domestic price of gold.” The rationale given by policymakers and economists alike was that gold neither contributes to production nor enhances productive capacity of the economy. Eventually in 1963, the government introduced the Gold Control Rules, which then gained statutory recognition in the form of the Gold (Control) Act in 1968. Initially, under the rules, manufacturing gold ornaments of higher than 14 carat purity was prohibited. Subsequently, in July 1963, refineries were restricted from manufacturing gold beyond fourteen carat purity. Additionally, ceilings were also placed on individual holdings of gold jewellery (individuals were not allowed to hold bullion) and all jewellers were notified to maintain records of all their business transactions. History to testament to how this perpetrated gold smuggling. Even today, the ill impact of the hasty gold ban is felt as we struggle to monetise gold and bring it into the formal financial system.

In this context, this discussion paper looks to understand the economies of bans through three case studies. The purpose of this paper is not to debate the merits of the ban, however, the paper does consider if bans are an appropriate measure, if they have served their purpose, and if they are more of a knee jerk reaction to a problem at hand. From a governance point of view, any ban that is considered, policymakers should ideally have considered all other possibilities and their implications and subsequently, even ruled them out, for a ban to be a solution. Furthermore, policymakers must have also carefully considered the impact of bans on the economy, on the people, on dependent businesses, and on employment. This is particularly true for a country like India.

Recent examples in India of proposed and executed bans in India are the ban on crypto currencies, the proposed ban on single use plastics, and the proposed ban on Electronic Nicotine Delivery System (ENDS) devices. We deliberately chose these three bans for their relevance. Crypto currencies are a reality in today’s world, and a product that several countries have learnt to regulate. In the case of the proposed ban on single use plastics, the government had to renege on its plan due to several representations from industry. More
recently, the government has tabled a bill in the parliament that looks to ban ENDS devices, while continuing to be mute on any bans on other smoking and non-smoking tobacco products. Another interesting parallel between the ban on ENDS devices and crypt currencies is that both products are recent innovations in the market. India does have a history of banning or over regulating to the extent of stymieing market development. Crypto currencies and ENDS devices are recent examples. India's stance on options and futures derivatives per se, peer to peer lending, and even the time taken to implement regulatory sandbox regulations is indicative of policymakers’ apprehensions about regulating innovative products. Over the years, options (limited) and futures and regulatory sandboxes (recently) regulatory sandboxes are a reality, but only after the global markets have already made significant progress in regulating these offerings. If India wants to leapfrog development, then we must learn to adapt to innovation and regulate these products to suit our markets rather than control or ban their growth.
2. The Ban of ENDS Device

2.1 The Background

The Government of India has recently banned the use of electronic cigarettes or e-cigarettes through an Ordinance namely “Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage and Advertisement) Ordinance, 2019.” In India, use of e-cigarette is fairly new, so its long term effects, if any, are still unknown. However, one study claimed to have found that e-cigarettes produce thirty one harmful chemicals, including some that are believed to cause cancer. Due to unavailability of any data on e-cigarette and based on the hunch that usage of e-cigarette will push people towards smoking regular cigarette, the Ministry of Health and Family Welfare, in August 2018, issued an advisory to all states recommending that they should not approve any new e-cigarettes and restrict the sale and advertisements of existing e-cigarettes. Based on this advisory, the total number of states banning e-cigarettes have reached sixteen.

The Government has heavily relied on two documents to justify the ban i.e. the WHO Framework Convention on Tobacco Control adopted in Geneva, Switzerland released on May, 2013 and a White Paper on Electronic Nicotine Delivery System (ENDS) released by the Indian Council of Medical Research (ICMR) in May 2019.

India is a signatory to the WHO Framework Convention on Tobacco Control which was developed in response to the globalisation of the tobacco epidemic. In 2014, the WHO Framework Convention on Tobacco Control invited all its signatories to consider prohibiting or regulating the use of e-cigarettes in their respective countries which was suggested due to emerging evidence on the negative health impact of e-cigarettes, which could result in lung cancer, cardiovascular diseases, and other illnesses associated with smoking traditional cigarettes. Since then, while few countries such as Brazil, Mexico, Singapore, and Thailand have banned the production, trade, and advertisement of e-cigarettes, other countries such as the United Kingdom, Canada, France, and New Zealand have brought out laws to regulate the manufacture, sale, advertisement, and use of e-cigarettes.

In May 2019, the Indian Council of Medical Research came out with a white paper on Electronic Nicotine Delivery System (ENDS) which called for a complete ban on e-cigarette

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in India. The white paper was much influenced by the American Heart Association which quoted similar reasons\(^7\). The reasons offered by the white paper for banning e-cigarette include containing of nicotine and flavour in e-cigarette and adverse effect on human health among others. Other reasons such as non-determination of short term and long-term health risks of e-cigarette users, benefit of e-cigarette as tobacco cessation, possibility of tobacco addiction, remained inconclusive due to unavailability of data which arise due to the extremely small market size of ENDS in India.

2.2 What the GATS Survey States

The White Paper by ICMR is predicated upon extensive secondary literature that largely cites the American Heart Foundation and data from The Global Adult Tobacco Survey (GATS) of 2016-17. The survey puts forth interesting findings. India is the third largest tobacco producing nation and the second largest consumer of tobacco products. The survey states that 266.8 million adults in India currently aged between 15 and 24 use tobacco in some form. Interestingly, of all tobacco products, the survey notes that products such as khaini, bidi, gutka, and paan with tobacco are the most commonly consumed. Regular cigarettes do not find immediate mention. Furthermore, while 10.7 per cent, which amount to approximately 99.5 million adults, smoke tobacco, and 199.4 million people use smokeless tobacco.

The survey also points out that of the 99.5 million tobacco smoking adults of the country, only 3 percent or 2,985,000 adults are merely aware of the existence of e-cigarette. The number of actual users of e-cigarette is even less. GATS 2016-17 reports that of the 99.5 million tobacco smoking adults in India, only 0.02 per cent or 19,900 users actually use e-cigarettes. Moreover, the users in the lowest age bracket i.e. 15-24 years accounts for only 0.02 per cent of the total users of e-cigarette i.e. 4 users. This figure when compared to the original smoking population in the country is simply inconsequential. Hence, the ban can be termed as a rash decision which is an outcome of poor understanding and lack of research on e-cigarette. It is also important to note that this is the first ever GATS survey to include questions (four questions to be precise) on e-cigarettes. We believe that this is an excellent initiative and that the next round must contain more detailed questions for enabling evidence based policy making.

2.3 The Alternative Narrative

The ICMR paper fails to mention that the cited negative impact of e-cigarettes are also applicable to regular cigarettes too, possibly with a larger health risk. Even the American

\(^7\) [https://www.heart.org/en/healthy-living/healthy-lifestyle/quit-smoking-tobacco/is-vaping-safer-than-smoking](https://www.heart.org/en/healthy-living/healthy-lifestyle/quit-smoking-tobacco/is-vaping-safer-than-smoking)
Heart Association takes a more realistic approach\(^8\). Instead of calling for a complete ban on e-cigarette, the Foundation is asking for stronger regulations such as taxing e-cigarettes at par with other tobacco products, removal of flavours to dissuade kids from vaping, and inclusion of e-cigarette in smoke-free laws, and raising of legal sale age for all tobacco product to 21 years. The American Heart Association further suggests in-depth research to understand the consequences of short term and long- term use of e-cigarette as well as to find any correlation of using e-cigarette to cessation of tobacco.

The ICMR White Paper has also been criticised by a letter\(^9\) from a group of sixty-two nicotine science specialists and health professionals from India and abroad. The letter refers to the critical appraisal\(^10\) of the ICMR White Paper undertaken by Konstantinos Farsalinos of National School of Public Health, Greece, Riccardo Polosa of the Department of Clinical and Experimental Medicine, University of Catania, Italy, and Dr Atul Ambekar of AIIMS, also chairperson of the Addictive Disorder Specialty Section, Indian Psychiatric Society. The letter states that the ICMR White Paper overlooks the substantial body of literature that demonstrates the harm reduction potential of e-cigarettes and its position is not in line with the recommendations of other authoritative health organisations worldwide which state that from a health perspective, e-cigarettes represent an important tool for smokers to reduce their risk. The letter further indicates that the ICMR White Paper has neglected evidences that prove that e-cigarettes has minimal contribution to third party health and has a strong potential for smoking cessation and relapse prevention. Most importantly, the letter categorically rejects the argument of the ICMR White Paper of e-cigarette being a gateway to tobacco addiction. It states that experimental use of e-cigarette is extremely unlikely to increase any risk for developing any disease, particularly given its very low risk. To drive home its point, the letter further highlights the marked and accelerated decline (by more than 50 per cent) in smoking prevalence among US youth observed since 2011, the period when e-cigarettes became popular, adding that availability of e-cigarettes might act as a “distraction” and deter youths away from combustible cigarettes. The letter concludes by stating that because the White Paper is based on uncritical reporting of the evidence it fails to report a balanced overview of the risk-benefit ratio of these new technologies, and grossly misrepresents the actual evidence base ipso facto stating the Committee’s proposal of banning e-cigarette in India being unjustified.

\(^8\) https://www.heart.org/en/healthy-living/healthy-lifestyle/quit-smoking-tobacco/is-vaping-safer-than-smoking
\(^10\) https://ijcp.in/Pages/Post_Detail.aspx?wid=20403
The New England Journal of Medicine published a randomized trial on e-cigarettes in January 201911 which was led by researchers at Queen Mary University in London and funded by Britain’s National Institute for Health Research and Cancer Research UK. The study showed people who were randomly assigned to use e-cigarettes quit smoking at almost double the rate of people who were randomly assigned to nicotine replacement therapy. The major findings of the study include:

- At the one-year mark, 18 percent of people in the e-cigarette group had abstained from cigarettes, compared to 10 percent in the nicotine replacement group.
- Participants in both groups said that e-cigarettes and nicotine-replacement products weren’t as satisfying as cigarettes — but the e-cigarette group rated the devices as more helpful and satisfying than the nicotine-replacement users rated their treatments.
- Interestingly, the successful quitters in the e-cigarette group were still overwhelmingly using them at one year, while those who stopped smoking in the nicotine replacement group mostly weren’t (80 percent compared to 9 percent). That means the e-cigarette users seemed to develop a reliance or habit the nicotine replacement users didn’t.
- As for side effects, the e-cigarette group had more mouth irritation but was also more likely to report a decline in coughing and phlegm. The nicotine replacement group, meanwhile, experienced more nausea.

On the whole, e-cigarettes acted as more effective quitting aids compared to regular nicotine-replacement therapy. This is true that there are confusing and contradictory media and public health messages on the relative safety of e-cigarettes in comparison to smoking. Quite contrary to the recent ordinance by the Government of India, the government in UK has taken a firm harm-reduction stance on e-cigarettes. Public Health England endorses these devices as a safer alternative to cigarettes and vehicles that can help smokers quit12. The endorsement is a result of systemic and robust evidentiary reviews conducted by the public health body coupled with in-depth parliamentary discussions on the subject matter. In these exercises, the conclusion has been overwhelmingly in favor of e-cigarettes when compared to combustible cigarettes. Today, there are NHS administered hospitals that have allowed sale of e-cigarettes inside the vicinity of these hospitals in an effort to encourage smokers to choose e-cigarettes over cigarettes. It is also being administered by NICE to patients with long history of mental health issues that makes them more susceptible to cigarette addiction.

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Shruti Rajagopalan (2019)\textsuperscript{13} critiques the Ordinance in her article “Smoke and Mirrors around India’s Ban on e-Cigarette” pointing out that the ban on e-cigarette is not aimed to have any visible impact on public health and is rather a gimmick by the government. Her article states that the traditional cigarette manufacturers and the big pharmaceuticals selling nicotine gums who will be gaining from this ban. Rajagopalan (2019) further pointed out that it is the government who actually benefits directly from this ban since more than four-fifth of the cigarette market in India is dominated by one company, of which 28.6 per cent stake holding lies with the Government of India and state-owned companies. Moreover, cigarettes are taxed at relatively high rates in India (64 per cent excise duty, 28 per cent GST, and 5 per cent cess). Although legal cigarettes account for less than 10 per cent of consumption but it accounts for almost 86 per cent of tax revenues from all tobacco related sale. It’s clear that a ban on regular cigarettes would deprive the government of an important source of revenue. On the panic of risk to health from smoking e-cigarette, the article states that the said risks are yet to be verified and none of the established risks are more than smoking regular cigarette or using non-smoking tobacco. In light of these evidences, it can be rightly stated that by banning e-cigarette the government is eliminating a line of substitutes for the consumers that may reduce their reliance on potentially more harmful tobacco products. Hence, the government must reconsider its banning of e-cigarette.

2.4 Adverse Impact of Prohibition of E-cigarettes

Growth of a ‘black’ and ‘grey’ market: Prohibitions usually lead to a black market where counterfeit and unstandardized products flood the market to meet the demand, there is also an element of a mushrooming growth of a grey market in the case of e-cigarettes. It is impossible to ensure quality and safety of such products. In addition, while regulation allows for age restrictions on sales, the black market makes illegal products available to all, regardless of age. We have also witnessed that in countries like Thailand there has been a 100 per cent year on year increase in vaping despite a prohibition in place since 2014\textsuperscript{14}.

In the United States of America (USA), the Center for Disease Control (CDC) is currently evaluating the sudden increase in lung illnesses that have been linked to vaping. To date, there have been seven deaths and several hospitalisations relating to this illness. The CDC has termed this illness as EVALI (E-cigarette and Vaping Related Lung Injury). However, all cases of EVALI point towards a common culprit- THC, the psychoactive component in cannabis and/or Vitamin E acetate, which is used as a thickening agent. It must be noted that neither element is present in legal e-cigarette products in the USA. Therefore, on account of

\textsuperscript{13} https://www.livemint.com/opinion/online-views/smoke-and-mirrors-around-india-s-ban-on-e-cigarettes-11570468584353.html
\textsuperscript{14} https://www.thephuketnews.com/e-cigarette-usage-in-thailand-going-up-despite-continued-ban-72749.php#EAW6EtApr1tfpqyv.97
being a largely unregulated market, unscrupulous players have started trading in counterfeit products that are laced with chemicals that are not approved by the FDA. This has prompted the FDA to issue a public health warning to USA citizens\textsuperscript{15} to avoid using any vaping products that contain THC OIL. It has not made any such statements about alcohols that are present in legal vaping products such as propylene glycol or glycerine. Therefore, it is important for India also lay down standards for the kind of products and ingredients that may be allowed and enforce an explicit prohibition on using any oil in e-cigarettes. This has been corroborated further by the Public Health England in its recent statement, where it observes that this outbreak “…is not a problem linked to long-term use of regulated nicotine vaping products. If it were, we would expect to see a very different demographic profile affected, more typical of long-term vapers\textsuperscript{16}.”

The risk of adulteration in a country like India is significantly higher due to the abundant availability of nicotine in the country, which can be used in counterfeit products along with other chemicals such as THC. In a prohibited market, an avenue will be created for unscrupulous elements to traffic products to consumers that have no quality standards. We may also see a spike in people who will source products from the black market, which may potentially contain other harmful chemicals. A prohibition scenario may also lead to a situation wherein users experiment with dangerous vaping methods such as dabbing\textsuperscript{17} and dripping\textsuperscript{18}, without much knowledge about its adverse effects as there would be very little oversight on such issues. Therefore, a complete prohibition on e-cigarettes will amplify the risk of EVALI reaching India and a thriving black market will allow indiscriminate use of such products, especially among the youth.

By contrast if we look at the United Kingdom (UK), there have been no such incidents or any major vaping related illness in the past 5 years since its use became common in the country. This is on account of stricter and more stringent regulations around the safety of e-cigarettes in these countries. The UK has the world’s third-highest uptake of e-cigarettes having around 3.6 million e-cigarette users, and government health officials promote e-cigarettes as a way to wean people off more harmful tobacco. In a recent statement, the Public Health England has also stated that European Tobacco Products Directive (EUTPD) which is the central law that regulates vaping products in the region, restricts ingredients and limits the level of nicotine in these products. EU regulations also put the burden on manufacturers and importers to look out for health problems and address them. Through the regulatory checks

\textsuperscript{15} https://www.fda.gov/consumers/consumer-updates/vaping-illness-update-fda-warns-public-stop-using-tetrahydrocannabinol-thc-containing-vaping


\textsuperscript{17} The action or practice of inhaling small quantities of a concentrated and vaporized drug, typically cannabis oil or resin.

\textsuperscript{18} Dropping e-cigarette liquid directly onto the hot coils of the device to produce thicker, more flavorful smoke.
and balances, the UK has also been able to restrict underage use of such products, wherein
the consumers are largely restricted to adult smokers. Furthermore, there are a total of 42
million e-cigarette users across the world but cases of EVALI have only been reported in the
USA, in part, because it’s a largely unregulated market and there was very little knowledge
about the prevalence of a black market for illegal THC e-liquids. Countries, which have
tightly regulated this category, have encouraged users to purchase from legal e-cigarette
brands and shops thereby negating the risk of sourcing such products from the black
market. Furthermore, it is apprehended, that countries which have prohibited the product and have
weaker enforcement mechanisms may see cases of EVALI come up in the near future. The
unintended consequences of a premature prohibition will be disastrous for a country like
India

Curtailing Consumer Agency: The right to choose is not only a legal right of the consumer
but forms a part of the larger concept of liberty ensured to each citizen by the Indian
constitution. Such restrictions result in depriving citizens of the opportunity to make an
informed choice about their health behaviours, especially with respect to products that might
assist them in leading a healthier life by shifting to a less harmful product vis-à-vis smoking. Respecting consumer agency is even more important considering the fact that in 2016-17,
about 55.4 per cent smokers in India were reported to be planning or at least thinking of
quitting smoking. The focus, therefore, should be in giving these smokers the right to choose
less harmful alternatives or at least reduce the adverse health and economic impacts that
accrue from a tobacco-addicted population.

Adverse impact on Ease of Doing Business: There exists a vast community of foreign
enterprises that view India as a target market for their goods as well as their investment,
owing mostly to the business-friendly policies implemented by your department. However,
restrictive policies like these that turn a blind eye to a product that is intended to produce a
net positive public health benefits risk creating an investor sentiment that looks away from
innovations in areas of social good and deter them for viewing India as a favourable market
for such products.

Loss of Economic Opportunity and Livelihoods: There existed many traders and importers
dealing in this category besides a sprawling supply chain and distribution network that
extends up to the informal local pan-sellers. A prohibition on ENDS means loss of jobs for all
those who were involved in these networks and impacts small and medium enterprises
adversely.
2.5 International Experience

Interestingly, while few countries around the world have opted to ban e-cigarette altogether, a majority of the developed economies have taken the conscious decision to regulate it for good. Today, there are 70 countries that regulate and allow the sale of e-cigarettes. The argument for this could be that banning of a certain product or service never helps, rather it only aggrandizes its use, only through black markets. There are numerous examples of this but the most relevant example in this matter is that of the national prohibition of alcohol (in the United States of America) between 1920 and 1933 made by the 18th amendment of the US constitution passed in 1919, only to be repealed in 1933 by the 21st amendment of the US constitution. Stephen Moss19 writes that the prohibition directly led to a rise in smuggling of alcohol. Ultimately thirteen years later, the US did away with the prohibition. Coincidentally, the 18th amendment is also the only amendment in the history of US constitution to be ever rescinded. Back home in India, the Gold (Control) Act of 1968 which prohibited citizens of India from owning gold and gold jewellery shared a similar fate. The Gold Control Act while trying to curb legal buying and sale of gold, unknowingly pushed black market demand of gold. Finally, the Act had to be repealed in 1992. Rise in sale of products and services through black market directly hits exchequer and hence the easy option for most nations is to implement regulation. That way, the sale and purchase of a product or service can be controlled and tinkered with as and when needed. This section deals with the regulations undertaken by the various countries to in regards to the use of e-cigarette.

2.5.1 European Union

E-cigarettes sold as consumer products in the EU are guided by Article 20 of the Tobacco Products Directive (2014/40/EU)20. The directive prescribes the various safety and quality requirements such as maximum nicotine concentration and volume for cartridges, tanks and nicotine liquid containers, packaging and labelling rules, monitoring and reporting of developments related to e-cigarettes, and Acts and reports on the basis of which the legislation is implemented.

2.5.2 Canada

E-cigarettes are regulated under the Tobacco and Vaping Products Act (TVPA)21 which was enacted on May 23, 2018. The TVPA modified the earlier legal framework of the earlier Tobacco Act of 1997 to regulate the use of e-cigarette among youngsters and to protect them

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19 https://www.theguardian.com/commentisfree/2016/mar/30/prohibition-google-autocomplete
20 https://ec.europa.eu/health/tobacco/ecigarettes_en
from nicotine addiction and tobacco use, while allowing adults access to e-cigarette products as a less harmful alternative to smoking.

2.5.3 New Zealand

New Zealand, which is also part of the WHO Framework Convention on Tobacco Control to protect public health policy from commercial and other vested interests of the tobacco industry has one of the most flexible rules regarding e-cigarettes despite the Government’s goal of “Smoke-free 2025”. In fact, the Ministry of Health of New Zealand in its official statement has considered vaping (e-cigarette) products to be a potential product that could help the Government’s goal of “Smokefree 2025”. The Ministry of Health encourages smokers who want to use e-cigarette products to quit smoking to seek the support of local stop smoking services. Local stop smoking services provide smokers with the best chance of quitting successfully and must support smokers who want to quit with the help of vaping products.22

2.5.4 United Arab Emirates (UAE)

The Emirates Authority for Standards and Metrology (ESMA) released its guidelines regarding ENDS on 6th January 2019. The ESMA regulations clearly defines what constitutes as ENDS, safety standards, permissible limits for tobacco, cartridges specifications among other standards.

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3. The Proposed Ban on Single Use Plastic (SUP)

3.1 The Definition of Single Use Plastic

The United Nations report defines plastic as “…a lightweight, hygienic and resistant material which can be moulded in a variety of ways and utilized in a wide range of applications.” Plastics do not biodegrade for many thousands of years, but instead break down very slowly over time into fragments called “microplastics.” As a result, over the years, their impact on the environment has been disastrous. In the same breath, single use plastics are defined as “…are commonly used for plastic packaging and include items intended to be used only once before they are thrown away or recycled. These include, among other items, grocery bags, food packaging, bottles, straws, containers, cups and cutlery.”

3.2 The Proposed Ban on Single Use Plastic

For many years now, we have depended on plastics, single use or otherwise. It revolutionised packaging. Of the 400 million tonnes of plastic that is produced every year, 36 per cent is used in packaging, followed by building and construction (16 per cent), and textiles (14 per cent). Plastics replaced traditional packaging material such as metal and glass for its cost effectiveness and ability to be pliable. In India, plastic is commonly used as a packaging material across many industries, such as, automobiles, pharmaceuticals, food delivery, agriculture, real estate and even textiles. In India, single use plastic are mostly earbuds, plastic bottles, cutlery, and packaging. The use of single use plastic grew with the culture of use and throw.

The Government of India had contemplated announcing a uniform all India ban on single use plastics on 2nd October 2019, to coincide with the 150th birth anniversary of Mahatma Gandhi. The government did not go ahead with this plan. Industry representations cited various reasons for not implementing the ban right away. The first reason was that the plastic industry supported many micro, small, and medium enterprises (MSMEs), across India – approximately fifty thousand processing units and over two thousand exporters. The second reason was that the sector contributed to the employment of almost 4 million people across the value chain.

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24 Ibid
25 Ibid
26 “Industry Perspective on Single Use Plastic” – Presented by Hiten Bheda, Chairman, Environment Committee, All India Plastic Manufacturers Association
The industry has also been quick to point out that the problem does not lie in plastics themselves, but with the way we dispose of it. Even while 60 per cent of India’s plastic waste is recycled, the rest that are found littered on roads, eventually find themselves either in the stomach of animals or in our landfills. The lack of an efficient recycling framework has only exacerbated the issue. Even while many Indian states have banned the use of plastic bags, this only applies to new use. Without ensuring that households dispose of their existing plastic bags in an appropriate manner, they continue to circulate in the economy. As a compromise, the government now intends to phase out all use of single use plastic by 2022.

3.3 The International Experience

The United Nations Environment Programme’s 2018 report on “Single-Use Plastics: A Roadmap for Sustainability” highlighted that while 60 countries have taken up bans and levies to curb single use plastic (SUP) waste, it is still far too early to determine whether these measures have the required impact on SUP waste or not.27 Additionally, burgeoning levels of plastic consumption which stand at almost 5 trillion plastic bags used worldwide per year, mean that dealing with already accumulated SUP is going to be a huge challenge.

This does not bode well for anyone, and was the wake-up call that spurred several nations into action. While the initial measures taken up by various governments have been limited to banning SUPs, levying fines on waste creation, and incentivising recycling and reduced consumption, there is more that remains to be done. The most complex of these measures that governments are only now beginning to navigate is the outright ban on SUPs. Given that plastic has been a part of industrial and individual consumption for quite a few decades now, removing it entirely from the production and consumption cycle may not be entirely feasible.

There are countries like South Korea, Singapore, United Kingdom, Germany and even African nations like Rwanda and Kenya which have each undertaken either a complete or partial ban of SUPs. In 2008, the Government of Rwanda implemented a total ban on plastic bags. This included a ban on manufacture, use, sale and import of plastic bags.28 The use of paper and cotton bags was encouraged, and the government also offered tax incentives to companies that were willing to invest in plastic recycling equipment or manufacturing environmentally-friendly bags. Despite the criticism that stakeholders were not well consulted, and that investments in recycling or environmentally-friendly manufacturing did not occur, the ban worked because the law was enforced with offender having to pay high fines and even being sentenced to jail time. In the long term, citizens adjusted their

28 Ibid pg. 49.
consumption according to the law and Kigali is considered among the cleanest cities in Africa today.

South Africa introduced a partial ban, that is, it banned plastic bags less than 30 microns thick and introduced a levy on retailers for handing out plastic bags to customers. The overall effect was that retailers passed on the levy charge to consumers, and consumers eventually began to budget the cost of the plastic bags into their shopping.\textsuperscript{29} As a result, there was only a temporary dip in plastic bag consumption, after which use of plastic bags returned to pre-levy levels. The other more important concern in the case of South Africa’s partial ban and levy was, no one knew what purpose the levy collected served – whether it went to reducing plastic production, encouraging manufacture of eco-friendly products, helped set up recycling plants or nothing at all. There was no monitoring of where the monies were spent, and therefore no accountability in terms of implementation.

Prior to the introduction of the ‘PlasTax’ by Ireland in 1998, a study was commissioned by the Irish Government on assessing how to reduce plastic bag use and estimate customers’ willingness to pay (WTP) for plastic bags. The study found that retailers gave out 1.26 billion plastic bags, which meant 328 plastic bags per customer every year.\textsuperscript{30} The study pegged customers’ WTP for plastic bags at EUR 0.024 per bag, therefore the government decided to levy a tax on plastic bags at point of sale of EUR 0.15. The increased cost was meant to be prohibitive and induce a behavioural change in customers. The tax was introduced after extensive consultations and a widespread awareness campaign. The government’s functions and intent were well defined and the tax collected went into an Environment Fund controlled by the Ministry of Environment, Heritage and Local Government. Within a year, the use of plastic bags fell from 328 bags per person to 21 bags per person. The wider public acceptance of the tax is touted as the strongest reason for its success.

South Korea’s approach is slightly different in that there is no total ban, however there is a levy on use of plastic (at point of sale). The Korean Government promotes suppression of use of plastic bags through the levy, while also including certain plastic products and their manufacture in the list of subjects under extended producer responsibility (EPR).\textsuperscript{31} This helps remove some of the burden from the consumer, and shifts some responsibility on to the producer/manufacturer.

\textsuperscript{29} \textit{Ibid}: pg. 51.
\textsuperscript{30} \textit{Ibid}: pg. 46.
\textsuperscript{31} ‘Disposable Plastic Bags – Suppress Use and Promote Recycling’, Ministry of Environment, Republic of Korea, 2\textsuperscript{nd} August 2018. 
http://eng.me.go.kr/eng/web/board/read.do?pagerOffset=40&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=21&orgCd=&boardId=912860&boardMasterId=522&boardCategoryId=&decorator=
Germany introduced the Circular Economy Act in 2012, which placed legally binding restrictions on producers and distributors of plastic goods (and other waste or toxic products such as electrical devices, batteries and oil). They too ascribe to the principle of producer responsibility. Germany has built an efficient waste management economy, with 15,000 waste treatment plants across the country, which employ over 250,000 people and generate approximately EUR 70 billion in revenues.

The example of Germany however, goes to prove that building waste management as an economic sector in itself could be the way to go in managing plastic waste, and removes the need for bringing in total or even partial bans.

3.4 The Economies of the SUP Ban for India

While considering any ban in India, one has to take into account the various implications of the same. In the case of the proposed SUP ban, there are three things that policymakers should consider. First, is the ban the only alternative? Second, what would be the environmental return of such a ban? Third, what would be the impact on economic growth and on employment? Fourth, are there alternatives to SUP available to facilitate a seamless transition?

Under India’s current economic scenario, a complete ban on SUP without considering any of the aforementioned questions could have worse effects. For example, the ban could cause multiple businesses to close thereby causing a further slowdown in the economy. Moreover, it would also result in significant short term unemployment. It is necessary for the government to think of ways in which businesses and employees alike can find alternative sources of livelihood.

Similarly, it is equally important to assess if India has viable alternatives for SUP, irrespective of which sector it is meant for. For example, switching back to other glass or paper as an alternative to SUP may not be a carbon neutral solution. Similarly, one must also consider if it is prudent to ban all single use plastics or only those that have alternatives. An interesting example was in that of pharmaceuticals. It has been suggested that while stainless steel equipment would have much longer life cycle than single use plastics, the cost to environment for sterilising the equipment will in all likelihood cause more harm to the environment32.

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33 https://www.pharmaceutical-technology.com/powder-handling/single-use-plastics-pharma
While bans may work in the short term, they do not present long term solutions. For India to address the problem of single plastic use, there are two aspects that merit greater attention. First, India must put in place a robust plastic collection, recycling, and disposal. Second, policymakers will have to find means of encouraging behavioural changes in her citizens. Even internationally only a few countries have had success with bans. For most, it has had no measurable impact in the short to medium term\textsuperscript{34}. Bans alone have not solved the current plastic ban.

\textsuperscript{34} UNEP (2018). SINGLE-USE PLASTICS: A Roadmap for Sustainability
4. The Ban of Crypto Currencies

4.1 Crypto Currency in India

The Government of India had taken a conscious decision in July 2019 to outlaw private cryptocurrencies based on a high level a high-level Inter-Ministerial Committee (IMC) that was constituted in November 2017 to study the issues related to virtual currencies and propose actions to be taken. In its report, submitted in February 2019 the Committee has looked at the definition of digital currency, cryptocurrency, compared international regulations of selected countries, mentioned issues related to virtual currencies (of which cryptocurrency is a part), and application of distributed ledger technology (DLT). The Committee regarded virtual currency as a “…digitally tradable form of value, which can be used as a medium of exchange or acts as a store of value or a unit of account” which is usually without a status of legal tender. The Committee defined cryptocurrency as “…a specific type of virtual currency, which is decentralised and protected by cryptographic encryption techniques... and instead, transaction data is recorded and shared across multiple distributor networks, through independent computers. This technology is known as Distributed Ledger Technology.” The main issues identified by the IMC in regard to cryptocurrency being regarded as traditional currency are:

- Cryptocurrencies being affected market fluctuations in comparison to fiat money. For example, the value of Bitcoin cryptocurrency fell to USD 20000 in December 2017 to USD 3800 in November 2018.
- It is difficult to regulate cryptocurrencies as they are decentralised as they lack a central authority for maintaining records of transactions.
- Risk of phishing cyber-attacks and ponzi schemes on cryptocurrencies due to the shortcomings of its design. Moreover, due to its inability to reverse a transaction, there are no means of redressing erroneous transactions.
- Requirement of large amount of storage and processing power, causing unfavourable consequences on country’s energy resources.
- Anonymity in transactions making them more vulnerable to money-laundering and terrorist funding activities.

The Committee has studied and compared different regulatory frameworks around virtual currency and crypto currency in different countries such as Japan, Switzerland and Thailand which allow use of cryptocurrencies as a mode of payment. The IMC observed that in Russia, they can be used as a mode of exchange (barter exchange), but not for payments. On the other hand, China has a complete ban on virtual currencies. The IMC pointed out that no country has allowed use of any virtual currency as legal tender.
4.2 Recommendations of the IMC:

The IMC has recommended that all private cryptocurrencies, except any cryptocurrency issued by the State, be banned in India and any activity connected with cryptocurrencies be criminalised through a law. It observed that an official digital currency can have several advantages over the existing payment mechanisms. These include availability of all records of transactions, cheaper alternate for cross-border payments and ease and safety of distribution. The Committee noted that there are several risks and issues associated with its implementation as well. Significant infrastructure investment would be required to issue a digital currency. Validating transactions in a distributed network would involve high electricity consumption and require high computation power. Further, there could be infrastructural challenges on account of electricity outages and internet connectivity. It further recommended that an open mind needs to be kept regarding introduction of an official digital currency in India. It recommended that, if required, a Standing Committee may be setup by the Ministry of Finance with representatives from RBI and the Ministry of Electronics and Information Technology (MEITY), to take into account the global and local technological developments in the field and revisit the issues related to virtual currencies, as and when required. It can further examine and develop an appropriate model of digital currency in India.

The Committee recognised the importance of the underlying technology i.e. the distributed ledger technology (DLT) of cryptocurrency has several potential applications. DLT makes it easier to identify duplicate transactions, and therefore can be utilised for fraud-detection, processing KYC requirements, and claim management for insurance. Further, it can be helpful for removing errors, frauds in land markets, if used for maintaining land records. Hence, the Committee further recommended that the Department of Economic Affairs should identify uses of DLT and take measures to facilitate its usage. Similarly, financial sector regulators should examine the utility of the technology in their respective fields.

4.3 Bill Summary of Draft Banning of Cryptocurrency and Regulation of Official Digital Currency Bill, 2019

The Inter-Ministerial Committee has proposed a draft Bill which bans cryptocurrencies, criminalises activities associated with cryptocurrencies in India, and provides for regulation of official digital currency. Key features of the Bill include:

**Cryptocurrency and its mining:** The Bill defines cryptocurrency as any information, code, number or token which has a digital representation of value and has utility in a business activity, or acts as a store of value or a unit of account. The Bill defines mining as an activity
aimed at creating a cryptocurrency and/or validating a cryptocurrency transaction between a buyer and seller.

**Prohibited activities**: The Bill provides that cryptocurrency should not be used as legal tender or currency in India. It prohibits mining, buying, holding, selling, dealing in, issuance, disposal or use of cryptocurrency in the country. In particular, the Bill prohibits the use of cryptocurrency for: (i) use as a medium of exchange, store of value or unit of account, (ii) use as a payment system, (iii) providing services such as registering, trading, selling or clearing of cryptocurrency to individuals, (iv) trading it with other currencies, (v) issuing financial products related to it, (vi) using it as a basis of credit, (vii) issuing it as a means of raising funds and (viii) issuing it as a means for investment.

The Bill allows for use of technology or processes underlying cryptocurrency for the purpose of experiment, research or teaching.

**Offences and Penalties**: The Bill provides for the following offences and penalties:

<table>
<thead>
<tr>
<th>Offence</th>
<th>Punishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining, holding, selling, issuing or using cryptocurrency</td>
<td>Fine or imprisonment up to 10 years, or both</td>
</tr>
<tr>
<td>Issuing any advertisement, soliciting, assisting or inducing participation in use</td>
<td>Fine or imprisonment up to seven years, or both</td>
</tr>
<tr>
<td>Acquiring, storing or disposing of cryptocurrency with intent to use</td>
<td>Fine</td>
</tr>
</tbody>
</table>

*Sources: Draft Banning of Cryptocurrency and Regulation of Official Digital Currency Bill, 2019; PRS.*

The Bill provides that any subsequent conviction for any offence under the Bill would be punishable with a fine and imprisonment of 5-10 years. Further, attempting to commit an offence will be punishable with 50 per cent of the maximum term of imprisonment for the offence or the applicable fine, or both. All offences punishable with fine may be compounded. Offences related to use of cryptocurrency for issuing related financial products or issuing it as a means of raising fund or investment, would be cognisable and non-bailable. All other offences would be non-cognisable and bailable.

The Bill provides that the maximum amount of fine levied will be the higher of: (a) three times the loss caused and (b) three times the gain made by the person. If the loss caused or the gain made by the person cannot be determined, the maximum amount of fine for acquiring, storing or disposing of cryptocurrency will be up to one lakh rupees. For all other
offences, the maximum fine will be up to INR 25 lakh. The Bill amends the Prevention of Money Laundering Act, 2002 to give effect to the offences.

**Regulation of digital rupee and foreign digital currency:** The Bill provides that the central government may, in consultation with the central board of RBI, approve a digital form of currency to be legal tender. Further, it provides that the RBI may notify a foreign digital currency as a foreign currency in India to be governed by the Foreign Exchange Management Act, 1999. Foreign digital currency means a digital currency recognised as legal tender in a foreign jurisdiction.

**Investigating Authority and punishment:** Only officers of the rank of Deputy Superintendent of Police or above may investigate offences under the Bill. The court will consider few factors while determining the quantum of punishment for the offences. These include the gains made by the individual and the harm caused to the financial system, among others.

**Immunity and exemptions:** The Bill empowers the central government to grant immunity to any person from prosecution under the Act, if such person makes full disclosure of the violation. Further, the central government may exempt certain activities from the list of prohibited activities under the Act, if it considers it necessary in public interest.

**Transition period:** The Bill provides for a transition period of 90 days from the commencement of the Act, during which a person may dispose of any cryptocurrency in their possession, as per the rules notified by the central government.

4.4 International Scenario on Regulations of Bitcoin

4.4.1 European Union (EU)

On July 5, 2016, the European Commission presented a legislative proposal to amend the Fourth Anti-Money Laundering Directive (AMLD). It suggested, inter alia, bringing custodian wallet providers and virtual currency exchange platforms within the scope of the AMLD, meaning they would be obligated to fulfil due diligence requirements and have in place policies and procedures to detect, prevent, and report money laundering and terrorist financing. The proposal contains a definition of virtual currencies, which are described as “a digital representation of value that is neither issued by a central bank or a public authority, nor necessarily attached to a fiat currency, but is accepted by natural or legal persons as a means of payment and can be transferred, stored or traded electronically.” On January 29, 2018, the text agreed at the inter-institutional negotiations of the European Parliament and the Council was approved in committee. The European Parliament adopted the text in
plenary session on April 19, 2018. The updated Directive will enter into force three days after its publication in the Official Journal of the European Union.

Furthermore, on March 8, 2018, the European Commission presented an Action Plan on how to take advantage of the opportunities presented by technology-enabled innovation in financial services (FinTech), like block chain, artificial intelligence, and cloud services. The FinTech Action Plan includes the recently launched EU Block chain Observatory and Forum, which will report on the challenges and opportunities of crypto assets later in 2018 and is working on a comprehensive strategy on distributed ledger technology and block chain addressing all sectors of the economy.

On October 22, 2015, the European Court of Justice (ECJ) held in its decision Hedqvist that transactions to exchange a traditional currency for bitcoin or other virtual currencies and vice versa constitute the supply of services for consideration, but fall under the exemption from value-added-tax (VAT). Buying or selling bitcoin is therefore exempt from VAT in all EU Member States.

On February 12, 2018, the European Supervisory Authorities for securities (ESMA), banking (EBA), and insurance and pensions (EIOPA) jointly issued a warning to consumers regarding virtual currencies, stating that they are “highly risky and unregulated products and are unsuitable as investment, savings or retirement planning products.” The warning complements the earlier two statements by ESMA on initial coin offerings (ICOs) in November 2017 and a warning to consumers and two opinions on virtual currencies by EBA in December 2013, July 2014, and August 2016, respectively. EBA welcomes the decision of the European Commission to bring custodian wallet providers and virtual currency exchange platforms within the scope of the Fourth AMLD and not to extend the EU Payment Services Directive 2015/2366 to virtual currency transactions for the time being. EBA suggests a separate regulatory regime to mitigate all the risks arising from virtual currencies.

The President of the European Central Bank (ECB), Mario Draghi, warned that bitcoin and other digital currencies are “very risky assets” due to their high volatility and speculative prices. He stated that “digital currencies are not subject to a specific supervisory approach,” but that “work is under way in the Single Supervisory Mechanism to identify potential prudential risks that these digital assets could pose to supervised institutions.”[133] In addition, in December 2016, the ECB and the Bank of Japan (BOJ) launched a joint research project named “Stella,” which looks at the possible use of distributed ledger technology for financial market infrastructures.
4.4.2 Australia

In August 2015, the Australian Parliament’s Senate Economic References Committee published a report titled “Digital Currency – Game Changer or Bit Player,” following the completion of an inquiry into “how to develop an effective regulatory system for digital currency, the potential impact of digital currency technology on the Australian economy, and how Australia can take advantage of digital currency technology.” The government responded to the Committee’s recommendations in May 2016. This included responses regarding the tax treatment of cryptocurrencies, which noted aspects of the following actions of the Australian Taxation Office (ATO).

The ATO has published a guidance document on the tax treatment of virtual currencies. The general guidance follows the finalization, in December 2014, of various rulings relating to the application of tax laws to bitcoin and other cryptocurrencies. According to the guidance, transacting with cryptocurrencies is “akin to a barter arrangement, with similar tax consequences.” This is because, in the view of the ATO, such currencies are “neither money nor a foreign currency.” Individuals who engage in cryptocurrency transactions are advised to keep records of the date of transactions; the amount in Australian dollars (“which can be taken from a reputable online exchange”); what the transaction was for; and who the other party was (“even if it’s just their bitcoin address”).

Cryptocurrencies may be considered assets for capital gains tax purposes, with the guidance stating: “Where you use bitcoin to purchase goods or services for personal use or consumption, any capital gain or loss from disposal of the bitcoin will be disregarded (as a personal use asset) provided the cost of the bitcoin is $10,000 or less.”

With regard to business transactions, the ATO guidance states that the Australian dollar value of bitcoins (being the fair market value) received for goods and services must be recorded as part of ordinary income, in the same way as receiving non-cash consideration under a barter transaction. A business that purchases items using bitcoin is “entitled to a deduction based on the arm’s length value of the item acquired.” Goods and services tax (GST) is also payable and is calculated on the market value of the goods or services, which is “ordinarily equal to the fair market value of the bitcoin at the time of the transaction.” When a business disposes of bitcoin, there may be capital gains tax consequences. If a business gives bitcoin to an employee this may be considered either a fringe benefit (if there is a valid salary sacrifice arrangement in order to receive the bitcoin) or normal salary and wages. If an entity is in the business of mining bitcoin, or buying and selling bitcoin as an exchange service, any income derived must be included in its assessable income, and any expenses incurred may be deducted.
The ATO has also published separate guidance on the application of the goods and services tax (GST) with respect to transactions involving digital currency. A previous ruling regarding GST was withdrawn in December 2017 following the passage of amendments to A New Tax System (Goods and Service Tax) Act 1999 and associated regulations, which apply to transactions after July 1, 2017. Under the amendments, sales and purchases of digital currency are not subject to GST. If a person is carrying on a business in relation to digital currency, or accepting digital currency as a payment as part of a business, then there are GST consequences. The changes were aimed at removing “double taxation” of digital currencies under the GST system.

According to news reports from January 2018, the ATO is consulting with tax experts “to help it identify and track cryptocurrency transactions and ensure all taxes are being paid.”

The Australian Securities and Investments Commission’s (ASIC’s) MoneySmart website provides information on virtual currencies and sets out various risks associated with buying, trading, or investing in such currencies. These include the fact that there are few safeguards because the exchange platforms are generally not regulated; large fluctuations in value; possible theft by hackers; and the popularity of virtual currencies with criminals. A separate page provides information about initial coin offerings, which ASIC calls a “high-risk speculative investment.”

In the area of anti-money laundering and counterterrorism financing (AML/CTF), the government introduced a bill in Parliament in August 2017 in order bring digital currency exchange providers under the AML/CTF regulatory regime, as recommended by the Senate committee referred to above. The bill was enacted in December 2017 and the relevant provisions came into force on April 3, 2018.

Under the amendments, digital currency exchanges will be required to enrol in a register maintained by AUSTRAC (Australian Transaction Reports and Analysis Centre) and implement an AML/CTF program “to mitigate the risks of money laundering as well as identify and verify the identity of their customers.” They will also be required to report suspicious transactions and maintain certain records.

**4.4.3 Japan**

In Japan, cryptocurrency exchange businesses are regulated. The Payment Services Act was amended in June 2016 and the amendment took effect on April 1, 2017. The amended Payment Services Act defines “cryptocurrency” as property value that can be used as payment for the purchase or rental of goods or provision of services by unspecified persons, that can be purchased from or sold to unspecified persons, and that is transferable via an
electronic data processing system; or property value that can be mutually exchangeable for the above property value with unspecified persons and is transferable via an electronic data processing system.

The Act also states that cryptocurrency is limited to property values that are stored electronically on electronic devices; currency and currency-denominated assets are excluded.

Under the Payment Services Act, only business operators registered with a competent local Finance Bureau are allowed to operate cryptocurrency exchange businesses. The operator must be a stock company or a “foreign cryptocurrency exchange business” that is a company, has a representative who is resident in Japan, and an office in Japan. A “foreign cryptocurrency exchange business” means a cryptocurrency exchange service provider that is registered with a foreign government in the foreign country under a law that provides an equivalent registration system to the system under the Japanese Payment Services Act.

The Act requires cryptocurrency exchange businesses to separately manage customer’s money or cryptocurrency apart from their own. The state of such management must be reviewed by certified public accountants or accounting firms. The exchange business must have a contract with a designated dispute resolution centre with expertise in cryptocurrency exchanges. The exchange business must keep accounting records of its cryptocurrency transactions and submit a report on the business to the Financial Services Agency (FSA) annually. The FSA is authorized to inspect exchange businesses and issue orders to improve their practices. The FSA may rescind the registration of a cryptocurrency exchange business or suspend its business for up to six months in cases where

- The exchange business loses one of the requirements for registration
- It turns out that the exchange business made the registration illegally
- The exchange business violates the Payment Services Act or orders based on the Act.

On January 26, 2018, Coincheck, one of Japan’s biggest cryptocurrency exchange businesses, lost about USD 400 million in NEM (cryptocurrency) tokens. The local Finance Bureau ordered Coincheck to submit a report on the same day, examined it, and issued an order of business improvement on January 29, 2018. The following day the FSA requested all cryptocurrency exchange businesses to review their system-risk management plans and report the results to the FSA. On March 2, 2018, the FSA conducted an on-site inspection of Coincheck. On March 8, 2018, the local Finance Bureaus issued business-improvement orders to seven exchange businesses, again including Coincheck.
A group of cryptocurrency exchange businesses publicized their decision to form a new self-regulating body on March 2, 2018, that all registered exchange businesses will join. The body aims to obtain authorization from the FSA under the Payment Services Act.

In addition, under the Act on Prevention of Transfer of Criminal Proceeds, cryptocurrency exchange businesses are obligated to check the identities of customers who open accounts, keep transaction records, and notify authorities when a suspicious transaction is recognized.

According to the National Tax Agency (NTA), the profit earned by sales of cryptocurrency is, in principle, considered miscellaneous income, rather than capital gains, under the Income Tax Act. The NTA compiled questions and answers regarding the tax treatment of cryptocurrency and posted it online on December 1, 2017. Miscellaneous income is added to the amount of other income, excluding specified capital gains, when a person’s taxable income is calculated and taxed.

4.4.4 Switzerland

The Swiss Canton of Zug is trying to establish itself as a hub for cryptocurrencies and Fintech start-ups. On November 2, 2017, the Commercial Register Office in the Canton of Zug started accepting bitcoin and ether as payment for administrative costs. Furthermore, the Commercial Register accepts cryptocurrencies as a contribution in kind for purposes of forming a company. In the city of Zug, municipal services (resident registration) of up to CHF 200 (about USD 210) can be paid with bitcoin.

On January 1, 2018, the municipality of Chiasso, in the Swiss Canton of Ticino, started accepting bitcoin as tax payments for amounts of up to CHF 250 (around USD 263). On February 16, 2018, the Swiss Financial Market Supervisory Authority (Eidgenössische Finanzmarktaufsicht, FINMA) published guidelines on the regulatory treatment of ICOs which complement its earlier FINMA Guidance from September 2017. Currently, there is no ICO-specific regulation, nor is there relevant case law or consistent legal doctrine. FINMA stated that due to the fact that each ICO is designed in a different way, it must be decided on a case-by-case basis whether and which financial regulations are applicable.

In an ICO, investors receive blockchain-based coins or tokens in exchange for the funds they transfer. The tokens are created and stored either on a blockchain specifically created for the ICO or on a pre-existing blockchain. FINMA differentiates between payment tokens (cryptocurrencies), utility tokens, and asset tokens. Payment tokens (cryptocurrencies) are defined as tokens that are used as a means of payment or as a means of money or value transfer. Utility tokens are those that provide digital access to an application or service by means of a blockchain-based infrastructure. Asset tokens represent assets such as a debt or
an equity claim against the issuer. According to FINMA, asset tokens are analogous to equities, bonds, and derivatives.

Operators of financial market infrastructures are subject to authorization by FINMA. If the tokens received in an ICO qualify as securities, trading will require authorization. Securities are defined as “standardised certificated or uncertificated securities, derivatives and intermediated securities which are suitable for mass standardised trading,” meaning they are “publicly offered for sale in the same structure and denomination or are placed with more than 20 clients, insofar as they have not been created especially for individual counterparties.” FINMA does not treat payment tokens or utility tokens whose sole purpose is to confer digital access rights as securities. However, utility tokens that have an additional investment purpose or a sole investment purpose at the time of issue, as well as asset tokens that are standardized and suitable for mass standardized trading, are classified as securities.

Funds raised in an ICO generally do not qualify as deposits within the meaning of the Banking Act. However, if there are liabilities with debt capital character, for example a promise to return capital with a guaranteed return, then such an ICO would require the organizer to obtain a banking license. When assets collected as part of the ICO are managed externally by third parties, the provisions of the Collective Investment Schemes Act apply. Provisions on combating money laundering and terrorist financing, which give rise to a range of due diligence requirements, apply to the ICO of a payment token (cryptocurrency) as soon as the tokens can be technically transferred on a blockchain infrastructure. In addition, the exchange of a cryptocurrency for fiat money or a different cryptocurrency as well as the offering of services to transfer tokens if the service provider maintains the private key (custody wallet provider) equally trigger the due diligence requirements according to the Anti-Money Laundering Act.

In September 2017, FINMA closed down the unauthorized providers of the fake cryptocurrency “E-Coin”, liquidated the companies, and issued a general warning about fake cryptocurrencies to investors. Furthermore, three other companies were put on FINMA’s warning list due to suspicious activity and eleven investigations were conducted into other presumably unauthorized business models relating to such coins.

In Switzerland, the individual cantons, the Swiss states, are obligated to levy income tax and wealth tax on the total property (assets and rights with a cash value) of taxpayers that are resident in their canton. Tax rates vary between the individual cantons. Cryptocurrencies are treated like foreign currencies for tax purposes and are subject to wealth tax. Holders of bitcoin or other cryptocurrencies are taxed at the rate determined by the tax authorities on December 31 of the fiscal year. As an example, the tax rate for bitcoin determined on
December 31, 2017, by the Swiss Federal Tax Administration was CHF 13784.38 (about USD 14,514). This rate is a recommendation for the cantonal tax authorities.

In January 2018, the Swiss State Secretariat for International Finance (Staatssekretariat für internationale Finanzfragen, SIF) reported that it would set up a working group on blockchain and ICOs. The working group will work together with the Federal Ministry of Justice and FINMA and involve interested businesses. It will study the legal framework for financial sector-specific use of blockchain technology with a particular focus on ICOs and report back to the Federal Council, the Swiss government, by the end of 2018.

4.4.5 United States of America (USA)

The U.S. Department of Treasury’s Financial Crimes Enforcement Network (FinCEN) has been issuing guidance on Bitcoin since 2013. The Treasury has defined Bitcoin not as currency, but as a money services business (MSB). This places it under the Bank Secrecy Act, which requires exchanges and payment processors to adhere to certain responsibilities like reporting, registration, and record keeping. In addition, Bitcoin is categorized as property for taxation purposes by the Internal Revenue Service (IRS).

4.5 Opinion on the Ban on Cryptocurrency in India

Anirudh Gotety in his article “Check crypto trade, ban won’t help” writes that “…Instead of analysing the benefits and risks of cryptos to adopt a meaningful regulation, Indian watchdogs reacted hastily by imposing a ban. A ban — which simply paves the way for illicit trade — should be the last resort when regulation can’t be the answer. Prohibition and betting are testimony to this truth.”

“Nonetheless, India’s interests would be better served with an efficient and robust regulatory mechanism. The ban, as it stands now, can be circumvented through crypto barter and even cash dealings. Instead, sterner trading rules and taxing the trades or transactions may help.”

“It would add to the government’s coffers if cryptos are (or were) considered goods under the GST — enabling a retroactive application of GST. Total revenue of the top seven Indian crypto exchanges were reportedly ₹40,000 crore and one has to figure out whether crypto exchanges would be required to pay GST (of 12 per cent or 18 per cent) on their entire revenue or only on the margins they charge from consumers. Then, a slew of crypto services could come under the tax net — the commission crypto miners receive, the actual sale of cryptos from one user to another, the margins exchanges charge, etc. Besides crypto sale, even barter — say Ethereum for Bitcoin — would attract tax. Local transactions would attract CGST,
SGST and IGST while cross-border trades would fetch IGST. Lastly, the earnings of exchanges, users, and others could be taxed under the I-T Act.”

Prashant Garg, Partner, Data and Analytics at E&Y rightly stated that “Crypto is just one manifestation of the technology. The regulation takes India away from speculative use of technology and paves the way for beneficial use of technology and thereby propagates auditable, secure digital business ecosystem.”

Pareen Lathia in “Can India really ban bitcoin? Is it possible at all to do so?” writes that cryptocurrencies cannot be really banned because bitcoin and most crypto currencies that run on Blockchain technology are decentralised. It means they do not run on one server or URL or IP address. These virtual currencies run on multiple nodes that can be owned and run by anyone and are usually spread across the globe. There is no central point for the governments to attack or block. This is very similar to Torrent protocol. It is peer-to-peer. At the simplest level, if I hold bitcoin in my wallet and transfer it to your wallet, there is no way any government can block it as the entry of transfer is recorded in a distributed ledger.

So, what is this ban? If you read the RBI circular, they have never used the words "ban" pertaining to bitcoins. It has only prevented any organisation regulated by the central bank to deal with businesses that have anything to do with crypto currencies. Practically, this means banks will have to stop deposits and withdrawals to and from Indian rupee on crypto currency exchanges. This news spread widely and was seen as a “ban on bitcoin”. Apart from this, the RBI has issued several warnings about scams and risks related to crypto currencies. It had also said there would be a crackdown on the illegal use of such cryptos. But traders are still buying and selling crypto currencies under a three-month notice period that was issued to all exchanges. Even after that, the RBI or the government cannot technically ban bitcoin. Also, in the latest event, the Delhi High Court has already challenged this circular calling it “unconstitutional” and the apex bank has to present the basis of this restriction on banks to the court.
5. Conclusion

While bans may offer a solution to a problem, it cannot be the default or the first solution. The economies of bans suggest that other aspects must be considered. An effective policy framework is expected to have better outcomes. In the case of crypto currencies, regulating the sector, will help in the growth of the sector in a calibrated manner. By banning crypto currencies, we exported a potential market out of the country. What we have also done is to effectively stymied innovation and advancement. Eventually, when the country is “ready” for crypto currencies and if and when they are allowed to operate, India will have an under developed market and will be far behind the rest of her peers. A classic example of this has been in the derivatives market. India’s derivative market is only now steadily opening up, even as the world has moved much ahead.

Similar parallels can be found in India’s proposed ban on ENDS devices. If anything, policymakers should learn from their experiences on the SUP ban that had been proposed and then rolled back. Alternative approaches are easily available. In the case of ENDS, given the high prevalence of tobacco cigarettes and smokeless tobacco in India, a risk-proportionate regulatory framework for regulating e-cigarettes could present a crucial opportunity to supplement and not substitute ongoing tobacco control efforts, in order to reduce smoking related death and disease burden in the country. The policy adjectives of regulations around e-cigarettes should be focused on ensuring they are produced and sold in line with tobacco harm reduction best practices. For this, the Cigarettes and Other Tobacco Products Act 2003 (COTPA) must be amended to specifically define e-cigarettes and providing for their regulation and policy framework. This would also enable the government to tax these devices. This was ENDS devices can quite easily be regulated in the same manner as other tobacco products.

For SUP, the government must put in place a vision plan for a circular economy for plastics. It is unlikely that SUP can be done away with in all sectors. It is therefore extremely important to have a robust recycling mechanism. It is important to also work towards creating behavioural change amongst people.

There is a need for more extensive survey based research in all sectors to help inform public policy. The government must reconsider its stance of opting for bans as a way of bringing about change and instead look to creating an enabling policy environment.