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Impact of adopting mandatory CSR regulations in India on total CSR spending (2002-2019):

Utilising a regime-switching threshold regression analysis.

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Short abstract: India in 2013 adopted a rule which mandates all companies above a certain net-worth/turnover/profit threshold spend at least 2% of its average net profits for CSR purposes. This paper investigates if the regulation had a significant impact on the overall CSR spending in India by using a regime shift analysis. (50 words)

I. Introduction

Corporate social responsibility is generally considered to be a voluntary act which should ideally seek to minimise the externalities of the business. However, in recent years some countries have tried to prescribe a mandatory CSR spend coupled with compulsory disclosures. India has been one of the early adopters of this model. In 2013 India mandated that companies above a certain turnover and net worth will have to spend around 2% of its average net profits for CSR purposes. Since the adoption of this regulation there have been a few amendments to further strengthen it and streamline the process with the objective of improving transparency and increasing societal impact of CSR spending. This paper quantitatively investigates as to whether there has been a significant shift in the CSR spending of the Indian firms post adoption of the mandatory CSR regulation and its subsequent amendments. This is achieved by implementing a regime switching threshold regression analysis on a panel dataset containing 34,135 firm-year observations with 6,160 unique firms representing 156 industries, focusing

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on the total CSR expenses of each firm, and the ratio of the CSR expenses and the profit after tax between the years of 2002 to 2019. This is the most comprehensive upto date study of the effects of legislating mandatory CSR regulations on corporate CSR spending in India.

The paper proceeds as follows. Part II traces the evolution of CSR culture in India, dividing the time period into four distinct phases, and discusses the development of the legislative principles of implementing CSR, focusing primarily on the mandatory CSR regulations and the reasons for their adoption, part III enumerates the data and methodology used in this study, and part IV analyses the results to determine if there was a significant impact of the mandatory rules on CSR spending.

II. The evolution of CSR culture and related legislative regulation in India

The CSR journey in India had originated with Indian businessmen engaging with the local community, considering the social impact of corporate production, and building upon employer-employee relationship. CSR as a concept evolved in India over four distinct phases –a pre-industrialisation phase dominated by religion-motivated CSR that ended by the mid-19th century¹, followed by a phase characterised by the presence of a primarily colonial value extracting enterprise that was in turn dominated by a philanthropy-motivated CSR and ended in the mid-20th century with the independence of India², a third phase that witnessed the emergence of the state-operated enterprises as the dominant

¹ This version of CSR drew inspiration from ancient Indian texts such as Kautilya's *Arthashastra* advocating the need for ethical and responsible ways of conducting business, as well as the various religious practices like the Hindu Dharmada, the Islamic Zakaar, or the Sikh Daashant that speak about using a part of the business income to help those in need within the community. See Anil Ghanghas, *Various phases of corporate social responsibility in India*, 3(1) International Journal of Academic Research and Development 861 (2018).

² Several prominent industrialists such as Birla, Tata, Godrej and Bajaj continued this philanthropy (possibly with occasional underlying political motives) in a more structured manner by setting up healthcare, charitable, and educational institutions including community trusts. See Sawati Nagwan, *Evolution of Corporate Social Responsibility in India*, 3(7) International Journal of Latest Technology in Engineering, Management & Applied Science 164 (2014). See also Nandini Deo, *A brief history of Indian CSR*, 2015, available at <https://www.gatewayhouse.in/a-brief-history-of-indian-csr/> (last visited on May 28, 2021), for a discussion about the colonial motivation of resource extraction leading to industrialisation during this phase and about the increasing employee involvement in the CSR activities.

industrial force and ended in the late 20th century with the dismantling of the planned economy model³, and the final phase that saw the development of formal corporate governance regimes in 1999, which in turn arguably started the trend of encouraging non-promoter centric rule-based CSR spending⁴. Eventually, the government started recognizing the tremendous potential of using corporate resources to address socio-economic concerns, and the companies to started realizing the beneficial role that CSR can play in improving the corporate-stakeholder relationship, encouraging innovation, allowing the company to leverage its reputation as a socially responsible organization to attract capable like-minded talent, and mitigating risk by contributing to the development of an efficient framework of corporate governance.

The earliest mention of non-shareholder specific financial spend can be found in the Companies Act, 1956, which despite not having any provision mandating CSR activities on the part of any company, indirectly mentions the allotment of corporate resources towards non-profit-making activities under section 293(1)(e) of the Act. This provision allowed the Board of Directors of a company to contribute “charitable and other funds not directly relating to the business of the company or the welfare of its employees” up to an annual amount of INR 50,000 (the original threshold was revised upwards during the lifetime of the 1956 Act, and this threshold was introduced by a revision made in 1977), or 5% of its average net profits calculated over the last three financial years as per the provisions of Sections 349 and 350 of the 1956 Act, whichever was greater.⁵ As one can gather from this provision, any CSR activity

³ This phase saw the private corporate organizations seeking to fill the vacuum created by the inefficiency of State-owned enterprises and establishing corporate trusts to promote *inter alia* rural welfare and development schemes with a view to improve their public image and secure possible future concessions from the protectionist measures of the State. This period also witnessed the first open participation of academics, businesspersons and policy-makers in CSR-related discussion in the form of a nation-wide CSR workshop, the first of its kind in India.

⁴ This phase, taking place in a liberalised, globalised, and considerably privatized Indian economy, witnessed greater influx of corporate funds, public-private collaboration, creation of corporate trusts and greater corporate sponsorship of non-governmental organizations into the CSR domain. See Jana Foundation, Evolution of CSR in India, available at https://www.janafoundation.org/wp-content/uploads/2015/10/evolution_of_csr_in_india.pdf (last visited on May 28, 2021).

⁵ Vide Section 293(1)(e), Companies Act, 1956.

was not only at the complete discretion of the Board, but also that there was no legislative or policy-prescribed incentive for the same either. That the 1956 Act originally encouraged the perception of companies as profit-maximising organisations and lacked in any effective statutory mandate for socially responsible business practices was a fact driven further home by judicial decisions like *Chiranjit Lal Chowdhury v. Union of India*⁶. While this Act was in force, in 2009, the Ministry of Corporate Affairs of the Indian Government brought forth the Corporate Governance Voluntary Guidelines with the objective of encouraging Indian companies to voluntarily achieve a high standard of corporate governance and responsible business conduct⁷ –these Guidelines eventually even served as a partial inspiration for subsequent legislative amendments regarding CSR.⁸ Subsequently in 2011, India officially endorsed the United Nations Guiding Principles on Business & Human Rights, following which the Ministry of Corporate Affairs, in an effort to follow globally accepted business standards, came up with the National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business.⁹ Some of the principles laid down under these Guidelines include the need for corporate governance based on equitable and sustainable growth and appropriate CSR funding.¹⁰ A study conducted by Ernst and Young and PHD Chamber in 2013 of the CSR activities of 50 companies listed on the Bombay Stock

⁶ AIR 1951 SC 40. Interestingly, this very decision also witnessed the judiciary commenting upon the nature of certain Indian companies that envisaged certain social duties on the part of such companies. It also leads to the possibility that the nature of India's CSR initiatives may display a unique identity of their own that is linked inextricably to the national identity; see Surya Deva, *Socially Responsible Business in India: Has the Elephant Finally Woken Up to the Tunes of International Trends?*, 41 Common Law World Review 6 (2012).

⁷ See Ministry of Corporate Affairs, Government of India, *Report of the High Level Committee on Corporate Social Responsibility, 2018*, p. 18, available at https://www.mca.gov.in/Ministry/pdf/CSRHLC_13092019.pdf (last visited on August 20, 2021) (hereinafter referred to as the 'Injeti Srinivas Committee Report' or 'ISC Report').

⁸ Ministry of Corporate Affairs, *Corporate Social Responsibility Voluntary Guidelines 2009*, available at https://www.mca.gov.in/Ministry/pdf/CSR_Voluntary_Guidelines_24dec2009.pdf (last visited on May 28, 2021).

⁹ These Guidelines had been framed by the Ministry after an extensive consultation with multiple stakeholders including policy makers, corporate entities, academics and civil society organizations. The aim was to adopt international best practices and norms in the context of Indian socio-cultural ethos. See ISC Report, p. 18, *supra* note 16. Following the statutory CSR mandate introduced by the Companies Act, 2013, these Guidelines had been revised in 2019 to produce the National Guidelines for Responsible Business Conduct, in an effort to adhere to the changing dimensions of business on a global level, as well as to the principles espoused by the Sustainable Development Goals and the aforesaid UN Guiding Principles.

¹⁰ *ibid*

Exchange, revealed healthcare, education, environment, rural development, and generation of employment and livelihood as the sectors that received most of the corporate attention and CSR funding.¹¹ Yet the corporate resources that were being diverted towards CSR, and the manner of socio-economic developments that they were being spent to facilitate, were not deemed adequate by the State. Early efforts of the government to introduce a CSR mandate in the Companies (Amendment) Bill, 2009 had also failed in the face of considerable opposition on the ground of it constituting legislative overreach into the private sphere and causing an adverse impact on the freedom to conduct business.¹²

It is after this period that India ushered in a landmark legislative change in the context of CSR, by providing for mandatory CSR for Indian companies meeting the prescribed threshold requirement. The Companies Act, 2013, by way of its Section 135, introduced such a mandate for all companies whether private or public, with a net worth of at least INR 5 billion, or a turnover of at least INR 10 billion, or a net annual profit of at least INR 50 million in any financial year.¹³ Such companies would need to form an internal CSR Committee (comprising at least three directors, at least one being an independent director (for companies required to appoint independent directors on the Board)).¹⁴ Said Committee is to formulate the CSR policy for the company, recommend about the quantum of funds to be allocated towards implementation of such a policy via specific activities mentioned in Schedule VII to the 2013

¹¹ Ernst and Young, and PHD Chamber, *Corporate Social Responsibility in India Potential to contribute towards inclusive social development*, (2013), Global CSR Summit, available at <https://fdocuments.in/document/corporate-social-responsibility-in-india-ey.html> (last visited on May 28, 2021).

¹² See Caroline Van Zile, *India's Mandatory Corporate Social Responsibility Proposal: Creative Capitalism Meets Creative Regulation in the Global Market*, 13 *Asian Pacific Law and Policy Journal* 269 (2012).

¹³ Vide Section 135, Companies Act, 2013. See also Rama Lakshmi, *India Mandates Increase in Charitable Giving by Corporations: Critics Fear Government Control*, available at https://www.washingtonpost.com/world/india-mandates-increase-in-charitable-giving-by-corporations-critics-fear-government-control/2013/09/10/e556d53a-157d-11e3-961c-f22d3aaf19ab_story.html (last visited on August 10, 2021). It should be noted that the government did not clarify during legislating whether the corporate spending on CSR would qualify as charitable spending for income tax deduction, or even as business spending. For further discussion on the initial ambiguities prevailing in the tax treatment of CSR expenses, see K.R. Srivats, *Clear Air on Tax Treatment of CSR Spend*, available at <https://www.thehindubusinessline.com/companies/%E2%80%98Clear-air-on-tax-treatment-of-CSR-spend%E2%80%99/article20732865.ece> (last visited on August 10, 2021).

¹⁴ Vide Section 135, Companies Act, 2013.

Act, and also periodically review the policy once it is in place. The Committee is also supposed to form and present to the Board of Directors an annual plan with regard to the list of activities supposed to be undertaken as part of CSR in the financial year concerned, the way such activities would be sought to be executed, as well as other relevant matters related to such activities, including their implementation schedules, fund utilization, monitoring and reporting mechanisms, impact assessment (it is mandatory for all companies having average CSR outlay of INR 100 million over the last three financial years to carry out such assessment of all its CSR activities with a minimum outlay of INR 10 million and which has been completed in the last one year from the date of the assessment), and the like.¹⁵ Additionally, the Board of such companies would also need to officially approve the aforesaid policy and lay it down in their Annual Report, as well as ensure that the company spends at least 2% of its average net profits calculated over the last three financial years as per the calculation method prescribed in Section 198 of the 2013 Act.¹⁶ The financial statements of the company must clearly reflect the actual amount spent, and if the company fails to meet the expenditure threshold in that financial year, the Board is supposed to clearly mention reasons for the same in their Annual Report. While allocating and spending such corporate resources, preference is supposed to be provided to the activities related to the local communities in the areas where the company has been operating. However, certain corporate activities have been specifically excluded from the ambit of being considered as part of CSR for discharge of statutory obligations of the company, such as activities undertaken for the exclusive benefit of its employees and/or their families, political donations made by the company under Section 182 of the

¹⁵ *ibid*, See also Companies (CSR Policy) Amendment Rules, 2021.

¹⁶ *ibid*

Companies Act, activities supported by the company on a sponsorship basis in order to derive marketing benefits, activities performed in the normal course of business, and the like.¹⁷

Although it was argued that the comply-or-explain approach will allow the companies to side step mandatory CSR spending – however, one should note that providing an explanation in order to escape statutory liability would only work in the context of the exact amount spent on CSR activities by the company, and that the violation of other statutory requirements under Section 135 such as the formation of the Committee and framing and publicizing the CSR policy would incur liability on the company's behalf.¹⁸ The company can channel its CSR funds through existing charitable trusts or non-profit companies incorporated under Section 8 of the 2013 Act and having an established track record of a minimum of three years in the concerned sector, or it might set up such an organization by itself for engaging in the activities funded by its CSR allotment.¹⁹ Non-compliance with the provisions of this section may lead to the company having to transfer a penalty amount up to twice its CSR obligations, or INR 10 million, whichever is less, to the Unspent CSR Account or the aforesaid fund mentioned in Schedule VII.²⁰ Apart from Section 135, the provisions of the Companies (Corporate Social Responsibility Policy) Amendment Rules, 2021 and its predecessor, the Companies (CSR Policy) Rules, 2014 would also have bearing on these procedural aspects.

The legislative introduction of the mandatory CSR instead of the earlier voluntary regime had initially attracted considerable criticism from corporations and powerful trade groups like the Confederation of Indian Industries, both because of its compulsory nature as well as because the adverse effect that it might have had on the companies enjoying the full benefits of economic liberalization. However, the

¹⁷ PWC, *Handbook on Corporate Social Responsibility in India*, available at <https://www.pwc.in/assets/pdfs/publications/2013/handbook-on-corporate-social-responsibility-in-india.pdf> (last visited on May 28, 2021).

¹⁸ *Supra* note 15.

¹⁹ *Vide* Rule 4 of the Companies (CSR Policy) Amendment Rules, 2021.

²⁰ *Vide* Section 135(7), Companies Act, 2013.

eventual comply-or-explain regime that the State opted for assuaged such worries to a considerable extent.²¹ Opinions do exist about the mandatory CSR framework having been originally intended to bring a part of India's corporate wealth to the poverty-stricken population of the country sorely in need of succour, particularly keeping in mind the prevailing degree of corporate philanthropy lagging behind in comparison to the speed at which corporate wealth kept growing in India.²² India's performance on several social development metrics was rather poor at the time of introduction of this mandate and the same had been reflected in international rankings too²³; a sizable chunk of the population suffered from poverty and lack of access to basic resources²⁴, with income inequality witnessing a sharp rise²⁵. These circumstances have made some scholars opine²⁶ that the CSR mandate had been intended by the government to bring back some form of balance in the Indian economy and provide the necessary funding for a number of social development projects, a view that appears to have been supported by official sources.²⁷ Yet there also exist sources suggesting that the mandate might not have been

²¹ Kuldeep Kumar Chauhan, and Shuchi Dawra, *Corporate Social Responsibility (CSR) in India – Evolution and Challenges (From Ancient Period to Present Age)*, 15(22) International Journal of Applied Business and Economic Research 23 (2017).

²² The Chronicle of Philanthropy, *India Sets Giving Mandate for Big Corporations*, available at <https://www.philanthropy.com/article/india-sets-giving-mandate-for-big-corporations/> (last visited on August 10, 2021).

²³ See Jean Dreze and Amartya Sen, *An Uncertain Glory: India and Its Contradictions* (Princeton University Press, 2013). The United Nations Human Development Index ranked India at the 129th place out of 189 nations at that time.

²⁴ Sanitation facilities, clean drinking water, adequate housing, sufficient nutrition and primary education were some of the basic resources that over 27% of the Indian population were lacking in. See Sabina Alkire et al., *Multidimensional Poverty Reduction in India 2005/6–2015/16: Still a Long Way to Go but the Poorest Are Catching Up*, (Oxford Poverty & Human Development Initiative, 2018).

²⁵ See Lucas Chancel and Thomas Piketty, *Indian income inequality, 1922-2015: From British Raj to Billionaire Raj?*, WID.world WORKING PAPER SERIES N° 2017/11 (World Inequality Lab, 2017) for a discussion about how over 22% of the Indian national income was restricted to only 1% of the national population.

²⁶ See Panchali Guha, *Why Comply with an Unenforced Policy? The Case of Mandated Corporate Social Responsibility in India*, 3(1) Policy Design and Practice 58 (2020).

²⁷ See Business Today, *Sachin Pilot Urges Companies to See CSR as Investment, Not Burden*, (2013) available at <https://www.businesstoday.in/current/corporate/sachin-pilot-on-corporate-social-responsibility-companies-act/story/198487.html> (Last visited on September 9, 2021), highlighting the opinion of the policymakers from the Ministry of Corporate Affairs to the effect of the compliance with the new CSR mandate leading to a potential additional fund of almost INR 20000 crores for various projects leading to the development of the country as a whole. See also Jayati Sarkar and Subrata Sarkar, *Corporate Social Responsibility in India—an Effort to Bridge the*

intended only for mobilisation of corporate resources to enable the nation's fulfilment of the Sustainable Development Goals, or for addressing any existing resource gap within the Indian society, but also to encourage the Indian companies to follow a macro-level operational philosophy that would be both sustainable as well as responsible on the one hand, and would also trigger the growth of innovation and a strong and efficient management system within said companies; such an approach also had the potential to be useful for utilising focused corporate efficiency to solve the socio-environmental problems on regional as well as national levels.²⁸ At the same time, one may also argue that the mandate was likely to remove the competitive disadvantage obstacle that Indian corporate entities had earlier been apprehensive of when it came to considering whether they should allow their for-profit wing to act in greater sync with their CSR division.²⁹ Additionally, opinions also exist the mandate is merely a form of the country and its populace holding the Indian companies accountable to their duty to

Welfare Gap, 7(1) Review of Market Integration 1 (2016), highlighting the opinions of other policy makers about the mandate being a potential gamechanger in the Indian development sector.

²⁸ See ISC Report, 2018, page 23, *supra* note 16. See also Ministry of Corporate Affairs, Government of India, *Report of the High Level Committee to Suggest Measures for Improved Monitoring of the Implementation of the CSR Policies, 2015*, available at https://www.mca.gov.in/Ministry/pdf/HLC_report_05102015.pdf (last visited on August 15, 2021). (hereinafter referred to as the 'Anil Bajjal Committee Report', or the 'ABC Report'). The latter in particular clearly mentions that had bridging a resource gap been the primary objective of the Indian Government for bringing the CSR mandate into effect, then the same objective could easily have been attained by levying new tax or cess on those very companies. However, one should also take into mind counter-opinions saying that imposing higher taxes might not have been an idea acceptable to the government given the already arguably high rate of corporate taxes in the country; see Kari Jahnsen and Kyle Pomerleau, *Corporate Income Tax Rates Around the World*, Tax Foundation Fiscal Fact No. 559, (Washington, DC: The Tax Foundation, 2017).

²⁹ This argument was based on the deduction that the mandate would require all the competing businesses to focus on CSR capacity building and efficiency up to a certain level, without worrying that their competitors might be refraining from doing the same and instead using the resources saved in the process towards gaining competitive advantage over their CSR-compliant brethren. See Philip Kotler and Nancy Lee, *Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause* (Wiley, 2005). See also Milton Friedman, *A Friedman doctrine-- The Social Responsibility Of Business Is to Increase Its Profits*, available at <https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html> (last visited on August 20, 2021) for how companies might have a motive not to engage in CSR activities at the cost of profit, in the absence of such a mandate. Further, see Craig Smith, *The New Corporate Philanthropy*, Harvard Business Review 105 (May 1994) and Michael E. Porter & Mark R. Kramer, *Strategy and Society: The Link between Competitive Advantage and Corporate Social Responsibility*, Harvard Business Review 78 (December 2006) for additional insight into the strategic and competitive use of CSR by companies.

take part in the bigger process of building, developing and sustaining the nation.³⁰ This line of thought finds support in the mixed experience that the general populace of the country has had with the multinational corporations that arrived post-liberalisation –an effort to create a foreign investor-friendly business environment occasionally resulted into having lesser supervision and regulation and eventually cheaper and less effective safety standards in the industry, thus causing tragedies like the Union Carbide pesticide plant lethal gas leak in Bhopal and the long-term water pollution caused by Coca-Cola.³¹ It is quite possible that the loss of public faith in the accountability of the multinational body corporate triggered the Indian government’s response to overhaul the existing Companies Act and introduce the CSR mandate to ensure that the companies are made to fulfil their duty towards the public at large. That the government could also have meant the mandate to be a way to get the private corporate sector to contribute more in terms of provision for public goods and development compared to the public sector is also possible, especially given the prevailing opinions about the dead-weight loss and lack of efficiency in the public sector³², the existence of rampant corruption in the public sector³³ and the plain lack of capacity on the part of the public sector and the government³⁴. One may even find scholars voicing the view that the mandate is nowhere near strong enough to play an effective interventionist role in the Indian market, especially in the absence of any effective coercion-based enforcement mechanism.³⁵

³⁰ See Pushpa Sundar, *Business and Community: The Story of Corporate Social Responsibility in India*, 5 (Sage Publications Private Limited, 2013).

³¹ See Andrew Crane et al. (eds), *Corporate Social Responsibility: Readings and Cases in a Global Context*, (Routledge, 2013). See also Aneel Karnani, *Corporate Social Responsibility Does Not Avert the Tragedy of the Commons - Case Study: Coca-Cola India*, (2013) Ross School of Business Paper No. 1210, available at <https://ssrn.com/abstract=2354022> or <http://dx.doi.org/10.2139/ssrn.2354022>. (last visited on August 20, 2021).

³² See Glenn Rayp and Nicolas Van De Sijpe, *Measuring and Explaining Government Efficiency in Developing Countries*, 43(2) *The Journal of Development Studies* 360 (2007).

³³ See Ronak D. Desai, *India continues to rank among most corrupt countries in the world*, available at <https://www.forbes.com/sites/ronakdesai/2018/03/07/india-continues-to-be-one-of-the-most-corrupt-countries-in-the-world/#6160bb1179c6>. (Last visited on August 31, 2021).

³⁴ See Milan Vaishnav et al., *Weak Public Institutions behind India’s Low State Capacity*, (Carnegie Endowment for International Peace, 2017).

³⁵ See Caroline Van Zile, *supra* note 22. In this paper, the author has further argued that the Indian companies may actually benefit from their CSR involvement and expenditure, directly or otherwise, and therefore prefer it over a regime of additional taxation.

While mandatory reporting and disclosure of CSR expenditure is a structure that has been adopted in other jurisdictions like the European Union or Denmark too³⁶, the Indian statutory mandate of minimum CSR spending is indeed one of its kind and hence it is all the more necessary to gauge the efficacy of such a regime in the light of its ability to attain the objectives with which it had been formulated.

Generally, the objective measurement of impact of CSR programmes has been a challenging task at the very least, given the absence of rating organisations for socially conscious programmes –even if broad-spectrum evidence may be obtained of the lack of further deterioration of a problem that is being sought to be solved via CSR programmes, yet the precise degree of progress made towards finding a viable solution to such a problem may not be amenable to easy measurement, thereby leaving said CSR programmes perpetually vulnerable to criticism.³⁷ An earlier study conducted on the CSR expenditure of Indian companies before and right after the introduction of Section 135 revealed that while the mandate might have led to an increase in the CSR activities of such companies, the value of such companies might have been adversely affected if they belonged to the statutorily mandated group.³⁸ At the same time, the new legislative provisions have given rise to considerable debate about their efficacy. One of the issues giving rise to such debate is whether the 2% mandate has introduced legal stability and certainty, while at the same time inadvertently lowering the CSR expenditure of companies that

³⁶ See European Commission, *Non-Financial Reporting*, available at http://ec.europa.eu/internal_market/accounting/non-financial-reporting/indexen.htm (last visited August 15, 2021) and Belgian Sustainable and Socially Responsible Investment Forum, *Denmark Introduces Mandatory CSR Reporting for Large Companies*, available at <http://www.belsifbe/default.aspx?ref=AFBA&lang=EN> (last visited on August 15, 2021). See also Paula J. Dalley, *The Use and Misuse of Disclosure as a Regulatory System*, 34 Florida State University Law Review 1089 (2007).

³⁷ See Alison E. McArdle, *A Stick in the Global Carrot Patch: The Business of Corporate Social Responsibility in India's Companies Act 2013*, 38 Suffolk Transnational Law Review 467 (2015).

³⁸ Dhammika Dharmapalaa, and Vikramaditya Khanna, *The impact of mandated corporate social responsibility: Evidence from India's Companies Act of 2013*, 56 International Review of Law and Economics 92 (2018). This study had been conducted with data obtained from the Prowess Database maintained on publicly traded Indian companies the Center for Monitoring the Indian Economy. For CSR data before 2013, sources such as the Securities and Exchange Board of India that mandated disclosure of CSR activities by listed companies even before 2013 have been used. Yet, the results mentioned here ought to be subjected to several qualifiers, such as possible lack of data pre-2013 owing to most of the disclosure having been voluntary, the possibility of other factors contributing to loss of value of the companies apart from their CSR mandate etc.

used to spend more on CSR before the introduction of the mandate.³⁹ At the same time, the explicit exclusion of donations or gifts given to charity from the ambit of permissible CSR activities under the 2013 Act might not harmonize with the potential of corporate philanthropy to contribute to alleviation of poverty.⁴⁰ In the light of the comments made by industry experts about the success of the new regime depending on factors like the ability of the Indian companies to integrate CSR within their overall operations and to embrace it as a vital part of conducting business in the days to come⁴¹, the time seems ripe for a study of the sort attempted by the present paper to examine whether the mandatory CSR regime has really managed to pass a purposive test and is on its way to attain the objectives with which it had been introduced.

IV. Research hypothesis, methodology and results

a) Research hypothesis

Previous studies show that there has been an increase in the total CSR spending by Indian firms after the introduction of the mandatory CSR spend rules. This is also clearly borne out by the graph below which shows the year-wise total CSR spending by corporates in India. However, no study yet has looked as to whether this increase post 2013 mandatory CSR spend regulation was substantial enough to register as a regime shift,⁴² which was the main aim and purpose of the mandatory spend legislation. Our primary hypothesis is that the expenditures towards the corporate social responsibilities of the Indian firms have undergone multiple regime switches in the last two decades to adapt to changing corporate governance

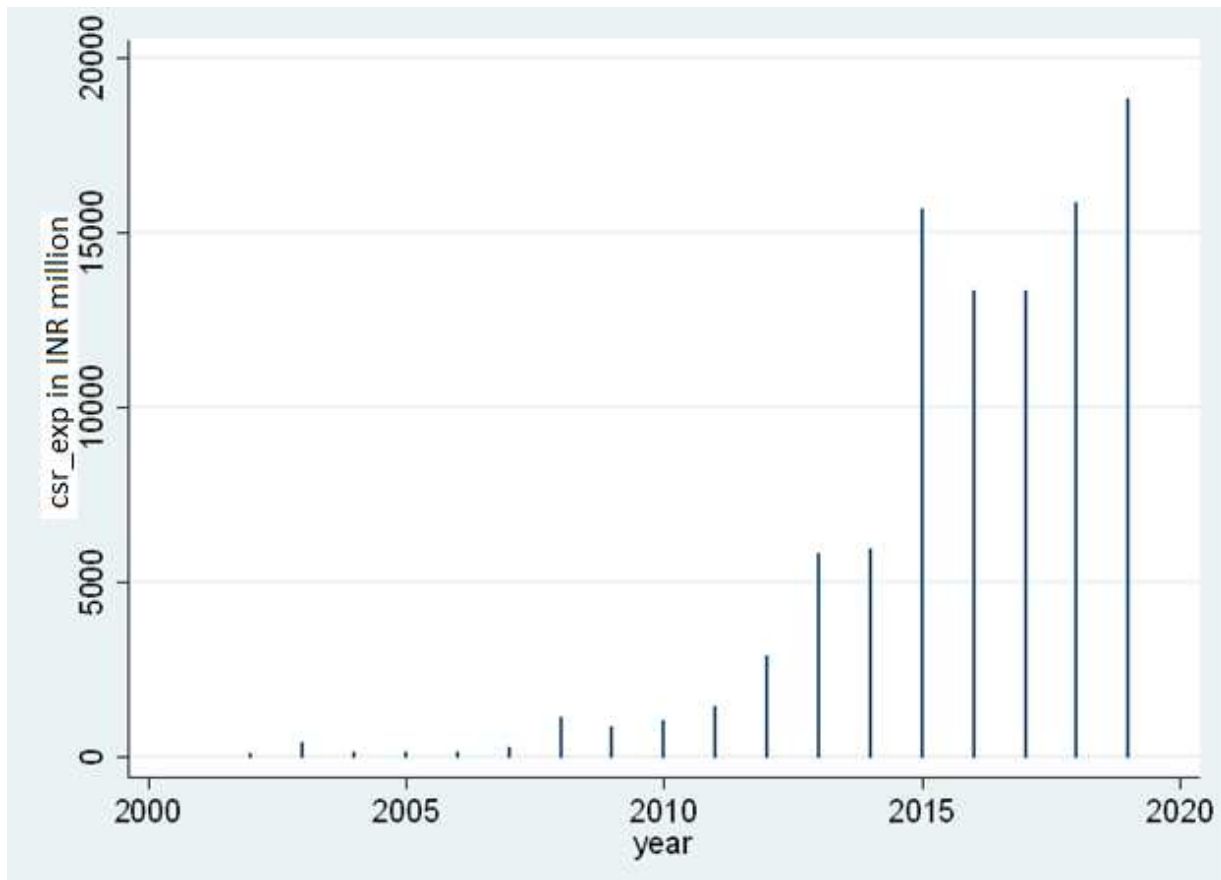
³⁹ Manfred Max Bergman *et al.*, *Corporate Responsibility in India: Academic Perspectives on the Companies Act 2013*, 11 Sustainability 5939 (2019).

⁴⁰ *ibid*

⁴¹ See Times of India, *Companies Act 2013 to boost transparency*, available at <https://timesofindia.indiatimes.com/city/visakhapatnam/companies-act-2013-to-boost-transparency/articleshow/26546298.cms> (last visited on August 20, 2021)

⁴² Economic and financial indicators generally follow a trend over time, however sometimes due to external or internal factors there is step change or break from the previous trend and a new trend may be created. The time period when the change occurs is known as the breakpoint and the overall change is generally known as a regime shift or a regime switch. See generally James Hamilton, 'Macroeconomic Regimes and Regime Shifts', (2016) NBER working paper no.: 21863, available at <https://www.nber.org/papers/w21863> (last visited August 20, 2021).

principles and the most massive one happened after the introduction of the mandatory CSR spending legislations.



b) *Data and methodology*

To answer whether there has been a regime-switch in the CSR expenditures by Indian companies over the last two decades, we consider data from 2002 to 2019 from the Prowess database, which is maintained by the Centre for Monitoring Indian Economy (CMIE) Pvt. Ltd. Some of the data is taken as reported, while we calculate the rest. Our panel dataset contains 34,135 firm-year observations with 6,160 unique firms representing 156 industries.

In order to estimate the regime-switching threshold regression model, we apply the threshold regression model⁴³. Threshold regression extends the linear regression to vary across regions. The threshold variable identifies those regions, being greater or less than a threshold value and a model may have multiple threshold values, which can either be specified or let the model calculate the number.

For our study, we consider the following threshold regression model:

$$Y_{it} = \alpha + \text{patit}(\text{csr_patit} \geq \gamma)\eta_1 + \text{patit}(\text{csr_patit} < \gamma)\eta_2 + u_i + \varepsilon_{it} \dots\dots\dots(1)$$

The equation (1) mentioned above can also be expressed as:

$$Y_{it} = \begin{cases} \eta_1 \text{patit} + \varepsilon_{it} & \text{csr_patit} \leq \gamma \\ \eta_2 \text{patit} + \varepsilon_{it} & \text{csr_patit} > \gamma \end{cases}$$

where, Y_{it} is the annual CSR expenditure (expressed by CSR_Exp) and patit is the region variable. The variable CSR_pat is the ratio between the CSR expenses of a firm to its profit after taxes and is the threshold variable in our model. Therefore, it divides the equation into two regimes with coefficients η_1 and η_2 .

This specification allows us to measure the impact of the proportion of the profits after taxes on the CSR expenses of a firm in multiple different subsets or regimes depending on the threshold levels of γ . The coefficients are estimated using the fixed effects estimation method, while the threshold variable γ is estimated following Hansen,⁴⁴ while we follow Wang⁴⁵ to estimate the panel data threshold regression. We test the threshold parameter γ for significance by conducting F- test by testing the following null hypothesis $H_0 = \eta_1 = \eta_2$.

⁴³ Hansen, B. E. (2000) 'Sample splitting and threshold estimation', *Econometrica*, 68(3), pp. 575–603. doi: 10.1111/1468-0262.00124.

⁴⁴ *ibid*

⁴⁵ Wang, Q. (2015) 'Fixed-effect panel threshold model using Stata', *Stata Journal*, 15(1), pp. 121–134. doi: 10.1177/1536867x1501500108.

At this point, we need to address two issues. The first is to establish the estimate of γ and the slope parameter α and the second is to test the significance of the threshold parameter γ . We resolve the first issue by estimating γ by solving Eq. (1) with all possible value of γ , and $\hat{\gamma}$ is the value that minimises the residual sum of squares calculated for all possible values of γ .⁴⁶ Once $\hat{\gamma}$ is isolated, the slope parameter is estimated as $\alpha(\hat{\gamma})$. We resolve the second issue by following Hansen⁴⁷ and since γ is not known under the null hypothesis, we conduct extrapolations through a model-based bootstrap, the cogency and characteristics of which are already ascertained in Hansen.⁴⁸

The crucial difference between the threshold model and the Markov switching model lies in the latter's assumption of the underlying state process that gives rise to the nonlinear dynamics (i.e., regime switching) being latent. On the other hand, threshold model analysis generally allows for the nonlinear effect to be influenced by observable variables and assumes that the number of thresholds as well as the threshold values to be unknown. Unfortunately, the fact that the conventional formulation of the threshold model includes the Markov switching model often goes unnoticed.⁴⁹ Naturally, the two models share numerous common characteristics, both econometrically and empirically. From an econometrical perspective, both models are influenced by the presence of unidentified parameters under the null hypothesis, which proffer contests to the conclusion, including the number of thresholds (or regimes) and their locations as well. From an empirical standpoint, both models, by design, take into

⁴⁶ Supra note 31.

⁴⁷ Hansen, B. E. (1996) 'Inference When a Nuisance Parameter Is Not Identified Under the Null Hypothesis', *Econometrica*, 64(2), pp. 413–430. doi: 10.2307/2171789.

⁴⁸ *ibid*

⁴⁹ Tong, H. (2011) 'Threshold models in time series analysis - 30 years on', *Statistics and its Interface*, 4(2), pp. 107–118. doi: 10.4310/SII.2011.v4.n2.a5; Tong, H. and Lim, K. S. (1980) 'Threshold Autoregression, Limit Cycles and Cyclical Data', *Journal of the Royal Statistical Society: Series B (Methodological)*, 42(3), pp. 245–268. doi: 10.1111/j.2517-6161.1980.tb01126.x.

consideration discrete and nonlinear effects.⁵⁰ In this study, we use the threshold regression model because of its advantages over the Markov-switching model.

c) Variables and model specification

The main objective of this study is to explore the possibility of existence of one or multiple threshold points in CSR expenditures by Indian companies over the last two decades. Towards that goal, we select the expenditures towards corporate social responsibility by the Indian companies as the primary variable for this study. The variable CSR_Exp represents the total CSR expenses of each firm, while CSR_pat indicates the ratio of the CSR expenses and the profit after tax and pat measures the profit after tax of each firm. All amounts annual figures. We have used the profit after tax (pat) figures from the Prowess database as reported, while we calculate the CSR_Exp and CSR_pat.

For our model, we select the variables following the logic suggested by Hansen.⁵¹ A firm needs to undertake the expenses towards CSR after paying its annual tax obligations. In other words, CSR expenses of a firm are its post-tax expenses and hence, are completely dependent on the amount of profits that it has been able to generate in the current year. Therefore, any change in profit is bound to have an influence on the amount of funds that a firm commits towards CSR. This implies that the CSR expenses form a proportion of the profit after taxes for a firm. It is, therefore, imperative that the both the determinants of a firm's CSR expenses are considered.

We construct our baseline model using the threshold regression model to explore whether there has been any regime-switch in the CSR expenditures by the Indian companies over the last two decades. In our baseline mode, we do not specify any number of threshold points and use CSR_pat and pat as region

⁵⁰ Chan, K. S., Hansen, B. E. and Timmermann, A. (2017) 'Guest Editors' Introduction: Regime Switching and Threshold Models', *Journal of Business and Economic Statistics*, 35(2), pp. 159–161. doi: 10.1080/07350015.2017.1236521.

⁵¹ Supra note 31.

variables, while we use CSR_pat as the threshold variable. This is because the CSR expenses are borne out of the profit after tax (PAT) of a firm. In other words, since the CSR expenses form a fraction of the profit after tax of a firm and therefore, CSR_pat becomes the predictor variable of both sides of the threshold.

We extend our threshold regression model by incorporating a time dimension. In this section, we explore whether there has been any regime switch in the CSR expenditures by the Indian companies in the last two decades. In other words, we explore when has there been a regime switch in the CSR expenditures in the subcontinent. In addition, we also explore whether there have been multiple regime switches in the same time period.

We also calculate the median CSR_pat per year between 2002 and 2019 to provide a rough estimation for the spend per firm per year and better analyse the threshold regression output.

d) Discussion of results

We analyse and present the results of our analysis in this section. At the start, let us look at the actual mean CSR_pat per year to provide us with a trend on CSR expenses in India.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
CSR_pat	1.14%	3.27%	0.7%	1.53%	0.89%	-0.18%	0.44%	0.96%	0.86%
Year	2011	2012	2013	2014	2015	2016	2017	2018	
CSR_pat	1.02%	0.36%	0.82%	1.5%	2.87%	1.74%	3.22%	2.26%	

Table 1 shows the regression analysis outputs. We start our baseline analysis with only one threshold point and then extend it to the maximum of five optimal points.

Table 1: Threshold regression outputs for CSR_pat					
Number of obs =	34,135	34,135	34,135	34,135	34,135
Number of thresholds =	1	2	3	4	4
Max thresholds	1	2	3	4	5
Threshold variable:	CSR_pat				

Order	1	2	2	2	2
		1	3	3	3
			1	1	1
				4	4
Threshold	0.031250	0.010627	0.010627	0.010627	0.010627
		0.031250	0.020141	0.020141	0.020141
			0.031250	0.031250	0.031250
				0.033399	0.033399
CSR_Exp	Coef.	Coef.	Coef.	Coef.	Coef.
	-1	-2	-3	-4	-5
Region1					
CSR_pat	23.33538 0	-25.907920	-25.907920	-25.907920	-25.907920
pat	0.006876	0.001350	0.001350	0.001350	0.001350
_cons	6.468838	3.354229	3.354229	3.354229	3.354229
Region2					
CSR_pat	15.11237 0	3318.48900 0	3590.37000 0	3590.37000 0	3590.37000 0
pat	0.054230	0.019857	0.015157	0.015157	0.015157
_cons	31.42666 0	-66.883980	-54.575430	-54.575430	-54.575430
Region3					
CSR_pat		15.112370	3410.59600 0	3410.59600 0	3410.59600 0
pat		0.054230	0.024979	0.024979	0.024979
_cons		31.426660	-87.693460	-87.693460	-87.693460
Region4					
CSR_pat			15.112370	2713.63000 0	2713.63000 0
pat			0.054230	0.032138	0.032138
_cons			31.426660	-87.435330	-87.435330
Region5					
CSR_pat				14.564300	14.564300
pat				0.055591	0.055591

_cons				36.260380	36.260380
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The results indicate that a regime-switch has indeed taken place at 3.125%. This means that 3.125% splits the entire sample into two regions. Region1 corresponds to the portion of the sample which the CSR_pat is less than or equal to 3.125%, while Region2 corresponds to the portion of the sample in which the CSR_pat is greater than 3.125%. In Region1, or the low CSR_pat region, the coefficient of -23.33 indicates that the CSR_pat are not persistent. The coefficient on pat is very close to zero, which implies that the CSR expenses are not influenced by the level of profits, when the amount of funds spend CSR is less than or equal to 3.125% of the profits. In Region2, or the high CSR spending region, the coefficient on CSR_pat is 15.11, implying that the CSR_pat is more persistent compared to that in Region1. In Region2, even though the coefficient on pat is close to zero as well, however, it is higher than that compared to Region1. This implies that the CSR expenses are more influenced by the profit levels once the threshold of 3.125% is exceeded. One of the limitations of the study is the calculation of CSR_pat per year rather than using the government recommended 3-year variable average calculation for it. This is done for ease of modelling.

We present the results of the regression outputs with two, three, four and five optimal threshold points in columns (2), (3), (4) and (5) respectively. Of particular interest is the output with five optimal threshold points. We are looking for the five optimal threshold points and we find that there are four threshold points, which take place when a firm spends in the order of 3.1250%, 1.0627%, 2.0141% and 3.3346% of profits towards CSR.

We now turn towards another dimension of our analysis, wherein we explore the years when there has been a regime switch. Once again, we construct our baseline model with only one optimal threshold

point and seek that from the model itself. Thereon, we increase the number of optimal threshold points to three, four and five, which is the maximum. Table 2 presents the results of our analysis.

Table 2: Threshold regression output for years					
Number of obs =	34,187	34,187	34,187	34,187	34,187
Number of thresholds =	1	2	3	4	5
Max thresholds	1	2	3	4	4
Threshold variable:	year	year	year	year	year
Order	1	2	2	2	2
		1	1	1	1
			3	4	4
				3	3
Threshold	2014	2009	2009	2009	2009
		2014	2014	2014	2014
			2018	2017	2017
				2018	2018
CSR_Exp	Coef.	Coef.	Coef.	Coef.	Coef.
	(1)	(2)	(3)	(4)	(5)
Region1					
CSR_pat	0.0102387	0.0086126	0.0086126	0.0086126	0.0086126
pat	131.3039	290.0831	290.0831	290.0831	290.0831
_cons	2.219095	3.957237	3.957237	3.957237	3.957237
Region2					
CSR_pat	0.0173205	0.0109053	0.0109053	0.0109053	0.0109053
pat	-1.313625	7.280064	7.280064	7.280064	7.280064
_cons	18.12948	1.166685	1.166685	1.166685	1.166685
Region3					
CSR_pat		0.0173205	0.0163534	0.018042	0.018042
pat		-1.313625	-1.499994	-1.801612	-1.801612
_cons		18.12948	16.85776	13.67676	13.67676
Region4					

CSR_pat			0.0199323	0.0135713	0.0135713
pat			1.085872	4.129615	4.129615
_cons			27.17274	24.91109	24.91109
Region5					
CSR_pat				0.0199323	0.0199323
pat				1.085872	1.085872
_cons				27.17274	27.17274

The results clearly indicate that there has been a regime switch in 2014. However, it is also evident that in the last two decades, the first regime switch happened in 2009. We witness two more regime switches in 2017 and 2018. The model remains stable even when we increase the number of threshold switches in 2017 and 2018. The model remains stable even when we increase the number of threshold to the maximum of five when the model retains its previous result and suggests that there are only four optimal threshold points in the last twenty years. This inference is, in fact, congruent with our previously estimated model using CSR_pat as the threshold variable, wherein, we obtain that the maximum number of optimal threshold points is four as well.

The threshold regression analysis specifying five optimum threshold points yields very interesting results for both the threshold variables, i.e., CSR_pat and year. The outputs for both the variables clearly indicate that the maximum number of optimum threshold points in the data is four. This lends support to our original hypothesis that there are multiple optimum threshold points in the CSR expenses by the Indian firms over the last two decades and we witness the regime switches in multiple years as well.

V. Analysis

From the results above it is clear that there was a measurable regime shift in the CSR expenditure as a percentage of profits per year by the Indian companies in the last two decades. If we require the model to predict only one threshold then the first shift coincides with the implementation of the 2013 rules on mandatory CSR in the year 2014. While this is expected, it is interesting to note that the model predicts

that based on the expenditure by the Indian corporates between 2002 and 2019, the regime shift threshold for 2014 was 3.125%. Which means that if a company had spent 3.125% or more of its post tax profits in 2013-2014 then on average it would have made a step change on its previous expenses on CSR. This would indicate that the government mandated spend of 2% was below the required percentage to make a regime shift impact, however conversely one can also argue that the government was more interested in formalising the trend of improving trend of CSR expenses by public companies and ensuring a continued minimum spend which is acceptable to corporations based on what they were already usually spending. This is also supported by the findings that in the preceding year 2013 the mean spend of CSR was 1% or less.

If we require the model to predict another threshold it predicts the year 2009 and a spending of 1.063% The year 2009 is quite interesting as a CSR expenses break point, as in a previous study it was predicted that the years 2008/2009 which came in the implementation phase of Clause 49 (adopted in 2005) and the publication of the Corporate Governance Voluntary Guidelines (2009) is also a break point for changes in corporate governance in India.⁵² The threshold for CSR spend for 2009 for it to shift the regime is calculated at 1.063% which is quite low and matches the low actual spending of 0.96% What is also very interesting to note is the steady increase of CSR spend between years 2007 and 2014, where the actual spend increases from -0.18% to 1.5%, this can be attributed to a variety of factors ranging from perceived shift away from pursuing shareholder value maximisation, aligning with predicted changes in regulatory environment, minimum spend commitments etc.

⁵² Guha, S.K., Samanta, N., Majumdar, A., Singh, M. and Bharadwaj, A. (2020), "Evolution of corporate governance in India and its impact on the growth of the financial market: an empirical analysis (1995-2014)", *Corporate Governance*, Vol. 19 No. 5, pp. 945-984. <https://doi.org/10.1108/CG-07-2018-0255>

VI. Conclusion

From the perspective of the companies, while one may argue that the institutionalized governance norms relating to CSR as prescribed under the 2013 Act and the associated Rules might promote corporate transparency and accountability in the long run, thus making an overall positive contribution to the business, at the same time, it is also true that the lack of corporate know-how of such companies beyond their regular business activities might make fulfilling the statutory mandate via the prescribed activities a difficult prospect, which in turn may lead to underreporting, misreporting, or greenwashing so as to avoid statutory liability.⁵³

In terms of impact the 2013 regulations do have a significant impact on the CSR spending in India, however the locked in spending is below what was already being spent by the Indian companies during that period. What is more interesting to note is the steady increase in the relative CSR spending in India in the years following the global financial crisis. This increase arguably had a more profound impact than the government mandated CSR spend as it was voluntary and could have perhaps increased further organically. However, with the government mandated floor, the companies which usually spend more may be tempted to spend no more than the minimum required.

When it comes to the State, the debate is still going on about whether the mandate encourages the State to abdicate its own responsibility in favour of the private sector, or whether it promotes private participation and collaboration in development together with the State.⁵⁴ There are also political implications that cannot be discounted with ease, with the prescribed activities including donating to the infrastructure projects initiated by the Central Government or the Prime Minister's Relief Fund, which have attracted their due share of controversy during recent times about not being of the highest

⁵³ Supra note 29

⁵⁴ D.R. Borman, and D. Chakraborty, *Corporate Social Responsibility in India: A Review of the Indian Companies Act, 2013 with Reference to CSR Provision*, 3 Paripex Indian J. Res. 1 (2014).

priority in terms of development and socio-economic growth of the local community that originally formed the focus of CSR. Despite lack of clarity on some statutory issues such as the adequacy of the explanation provided by the Board for non-compliance with the yearly CSR expenditure threshold⁵⁵, the treatment of tax deductability of CSR expenditure under the Income Tax Act, 1961 which in turn may lead to double taxation, the possible inclusion of a company within the mandate despite having incurred a loss in a given financial year, one may argue that so far the emergence of Section 135 and associated Rules have overall given a fillip to the CSR scene in India.

Thus, we may conclude that through legislating a mandatory CSR spend regulation the Indian government has ensured a sustained, significantly higher than previous CSR spending. What is needed now would be a disclosure and evaluation mechanism to ensure that the spending has the necessary impact.

⁵⁵ Mani Goswami, *A study on implications of CSR rules under Companies Act, 2013*, (2015), available at https://www.internationalconference.in/XVI_AIC/TS4_pdf/4.MANI%20GOSWAMI.pdf (last visited on May 28, 2021).