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A Relational Governance Perspective on the Politics of China's Social Credit System for Corporations

Alice de Jonge

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A Relational Governance Perspective on the Politics of China's Social Credit System for Corporations

ALICE DE JONGE*

Abstract

This paper uses a comparative method to analyze China's evolving Social Credit System (SCS) for corporations, and the political discourse used to portray SCS as a governance tool facilitating Corporate Social Responsibility (CSR) with Chinese characteristics. A modified relational governance framework is used. The importance of relationships (*guanxi*) in the Chinese business context is that it makes a modified form of the relational governance perspective uniquely appropriate. This study also draws upon evolving literature examining the role of artificial intelligence (AI) in international business contexts.

China's corporate SCS is explicitly designed to evaluate corporate behavior through a "scoring" system of "points." A comparative lens highlights the similarities, and crucial differences, between this and recent efforts to develop concepts of non-financial capital giving value to "social capital" in business contexts.

This paper makes a unique contribution to the comparative governance literature by providing unique comparative insights into China's corporate SCS, and by setting these insights in the context of a world increasingly dominated by two competing models of AI-driven organizational governance - one controlled by western technology giants and driven by primarily commercial motives—the other shaped and driven by the politics of China's Party-state institutions.

*Where is the wisdom we have lost in knowledge?
Where is the knowledge we have lost in information?
TS Eliot – The Rock*

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I. Introduction

China's Social Credit System (SCS) is a high-tech, data-driven system which has the potential to shape corporate behavior, but not necessarily for the better. This paper seeks to understand China's SCS using a comparative lens. It takes the view that "a comparative perspective is not only a necessary response to the challenges we collectively face but also a proactive strategy to learn from each other's experiences to formulate appropriate responses to the global challenge of big data in an increasingly complex social world."¹ By adopting a comparative law perspective, this paper argues that a modified relational governance framework provides a useful theoretical tool for understanding how corporate behavior is being shaped by China's SCS. The relational governance model acknowledges the presence of politics in decision-making processes and recognizes that the boundaries between state, business, and civil society are far from clear, and in some state contexts the three may be closely entwined. This is very much the case in China, making the modified relational governance model eminently suited for adaptation to the Chinese context.

The relational governance framework takes as its starting point Midttun's² identification of three main sets of governance actors—government, industry, and civil society—and the processes of exchange between them. Albareda et al.³ and Lozano et al.⁴ build upon this framework in their analysis of the role of government and governance structures play in driving public Corporate Social Responsibility (CSR) policy. Both Scherer and Palazzo,⁵ and Fairbrass, and Owens⁶ recognize the role of politics and power in the government-business-civil society relationships that shapes CSR. Fairbrass

1. Min Jiang & King-Wa Fu, *China Social Media and Big Data: Big Data, Big Brother, Big Profit?*, 10 POL'Y & INTERNET 372, 389 (2018).

2. Alte Midttun, *Realigning Business, Government and Civil Society. Emerging Embedded Relational Governance Beyond The (Neo) Liberal and Welfare State Models*, 5(3) CORP. GOVERNANCE (SPECIAL ISSUE) 159 (2005).

3. Laura Albareda et al., *The Government's Role in Promoting Corporate Responsibility: A Comparative Analysis of Italy and UK from the Relational Perspective*, 6(4) CORP. GOVERNANCE 386 (2006) [hereinafter Albareda et al., *Promoting Corporate Responsibility*]; Laura Albareda et al., *The Changing Role of Governments in Corporate Social Responsibility: Drivers and Responses*, 17(4) BUS. ETHICS EUR. REV. 347 (2008).

4. JOSEP M. LOZANO ET AL., GOVERNMENTS AND CORPORATE SOCIAL RESPONSIBILITY (2008).

5. Andreas Georg Scherer & Guido Palazzo, *Toward a Political Conception of Corporate Responsibility: Business and Society Seen from a Habermasian Perspective*, 32(4) ACAD. MGMT. REV. 1096 (2007).

6. Jenny Fairbrass & Anna Zueva-Owens, *Conceptualising Corporate Social Responsibility: 'Relational Governance' Assessed, Augmented, and Adapted*, 105(3) J. BUS. ETHICS 321 (2012).

& Zueva-Owens⁷ also point to failures in existing relational governance analyses to capitalize upon insights from the political science literature on governance and public policy. This failure has resulted in a blindness towards the role of politics and power play in shaping relationships between government, business, and civil society. Such blindness makes relational governance understandings of CSR developed in Western contexts inappropriate for understanding CSR in different socio-political contexts without significant adjustment. Fairbrass and Zueva-Owens, therefore, developed a revised model of relational governance embodying “a more complex understanding of the relations between the three sets of actors.”⁸

This paper adds to the Fairbrass and Zueva-Owens model of relational governance theory by drawing upon social capital theory. Social capital theory is seen as particularly relevant to an understanding of China’s SCS. First, because of the ways in which it attributes value to relationships in society, governance, and business. Second, because of its use of discourses of *trust*. Both social capital theory and China’s SCS see *trustworthiness* as inherently valuable.⁹

The first two sections of this paper explain the methodological and theoretical frameworks employed, with a particular focus upon why relational governance and social capital theory are relevant lenses through which western scholars can begin to understand China’s SCS. The third and fourth sections of this paper then examine the workings of China’s SCS, and the ways in which that system operates to politicize the value of *trustworthiness*. The paper concludes by recognizing that China’s other major 21st century strategic initiative—the Belt and Road Initiative—is ensuring that the reach and impact of the SCS extend well beyond China’s own national borders.

A. Methodology

The relational governance model focuses on how government, business, and civil society shape and influence a firm’s social and environmental behavior.¹⁰ This model offers a useful framework for understanding how government, business and civil society drive public policy approaches to CSR.¹¹ Recent efforts to understand CSR within a relational governance framework

7. *Id.*

8. *Id.* at 332.

9. Jürgen Grote & Matteo Bonomi, *Making and Breaking Social Capital: The Paradox of China’s Social Credit System*, DIALOGUE OF CITIZENS RSCH. INST. (May 28, 2018), <https://doc-research.org/2018/05/making-and-breaking-social-capital-the-paradox-of-chinas-social-credit-system/> (Ger.).

10. Midttun, *supra* note 2.

11. Albareda et al., *Promoting Corporate Responsibility*, *supra* note 3; LOZANO ET AL., *supra* note 5.

often neglect the role of politics and power in shaping government-business-civil society relationships. For this reason, this paper uses a comparative methodology to modify the relational governance model in its application to China's SCS.¹²

Comparative analysts have sought to understand how different governance systems shape CSR.¹³ In America, CSR remains primarily a matter of corporate discretion and the market place. In Europe, the European Union (EU) and national governments play a more active role; while in East Asia, traditions of industrial paternalism persist in government efforts to control the shape and direction of CSR.¹⁴ The comparative approach used in this paper allows for the analysis of different roles played by society, economy, and politics in shaping CSR in the Chinese context and more westernized CSR environments respectively. As Van Hoecke¹⁵ has noted, the analytical comparative method is particularly "useful for understanding very different legal relations and conceptual frameworks in other cultures."¹⁶ Like other comparative methodologies, however, it "cannot be carried out without some minimum law-in-context approach."¹⁷

Sometimes "comparing" is considered to be a "method" in its own right and is called "the comparative method" without further explanation or concrete guidelines. Van Hoecke's close analysis of the literature identifies six different methods for comparative research: the functional method;¹⁸ the structural method;¹⁹ the analytical method;²⁰ the law-in-context method;²¹ the historical method, and the common-core method.²² The analytical method is used in this study. Its power lies in its emphasis on identifying differences and commonalities between legal systems with their different relationships or bundles of "rights" and "obligations" (legal duties). The analytical comparative method is focused upon identifying the underlying essence of respective rights/duties-obligations and their correlating duties-obligations/rights.²³ Van Hoecke emphasizes the contextual nature of all comparative analysis. For present purposes, this means that a "law-in-

12. Fairbrass & Zueva-Owens, *supra* note 6.

13. Jean-Pascale Gond et al., *The Government of Self-Regulation: On the Comparative Dynamics of Corporate Social Responsibility*, 40(4) *ECON. AND SOC'Y* 640 (2011) (U.K.).

14. *Id.*

15. Mark Van Hoecke, *Methodology of Comparative Legal Research*, 12 *L. & METHOD*, Dec. 2015, at 1 (Neth.).

16. *Id.* at 16.

17. *Id.*

18. *Id.* at 9.

19. *Id.* at 11.

20. *Id.* at 13.

21. *Id.* at 16.

22. *Id.* at 18-19.

23. Van Hoecke, *supra* note 15, at 13.

context” approach, which recognizes that law always operates within a distinct historical, political and socio-economic context, and informs the comparative lessons drawn throughout the paper.

B. Adapting the Relational Governance Framework Using the Comparative Method

There are various examples of government initiatives seeking to shape CSR policies—both public and private. In Western markets, supra-national and inter-government efforts have emerged primarily from Organization for Economic Cooperation and Development (OECD) and EU-based initiatives, including the OECD Guidelines for Multinational Corporations,²⁴ the OECD due diligence guidance for responsible business conduct,²⁵ the European Business Network on Corporate Sustainability and Responsibility,²⁶ and EU Directive 2014/95/EU on non-financial reporting.²⁷ Global initiatives include the Global Compact,²⁸ the Global Reporting Initiative (GRI), and the United Nations Guiding Principles on Business and Human Rights.²⁹

Governments have also sought to facilitate the relationship between business and civil society, such as the Business in the Community (BITC) UK initiative and the social and environmental reporting requirements of France’s Grenelle II Act. Governments have even provided a variety of tools to support civil society efforts to shape CSR initiatives, including ranking and scoring indices developed by private actors. These indices include websites like Foreign Trade Online’s blacklist database³⁰ and CSRHub’s ratings and sustainability database;³¹ “ratings” tools on various travel and hospitality websites; and non-governmental organization (NGO) investigation and reporting initiatives (e.g., Baptist Aid Ethical Fashion Report).

24. Org. for Econ. Co-operation and Dev. [OECD], *OECD Guidelines for Multinational Enterprises*, (Sept. 29, 2011), <http://dx.doi.org/10.1787/9789264115415-en>.

25. Org. for Econ. Co-operation and Dev. [OECD], *OECD Due Diligence Guidance for Responsible Business Conduct*, (2018), <https://mneguidelines.oecd.org/OECD-Due-Diligence-Guidance-for-Responsible-Business-Conduct.pdf>.

26. THE EUR. BUS. NETWORK FOR CORP. SUSTAINABILITY & RESP., <https://www.csreurope.org/> (last visited Feb. 15, 2021) (Belg.).

27. Council Directive 2014/95, of the European Parliament (Oct. 22, 2014).

28. U.N. GLOBAL COMPACT, <https://www.unglobalcompact.org> (last visited Feb. 15, 2021).

29. U.N. HIGH COMMISSIONER FOR HUMAN RIGHTS, *Guiding Principles on Business and Human Rights* (2011), https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf.

30. *B2B Supplier/Buyer Blacklist (SBBL)*, FOREIGN TRADE ONLINE, <https://www.foreign-trade.com/blacklist/a> (last visited Mar. 13, 2021).

31. *Search Ratings – CSR Report*, CSRHUB, <https://www.csrhub.com/csrhub/> (last visited Mar. 13, 2021).

There are even industry-led initiatives such as the *Voluntary Principles on Security and Human Rights*,³² the *Extractive Industries Transparency Initiative*,³³ and the finance sector's *Equator Principles*³⁴ that fill institutional and legal voids by providing an "implicit" understanding of what is required for business social legitimacy.³⁵ The finance sector has also developed investor-oriented and stock exchange-related CSR indices such as MSCI's ESG indexes,³⁶ the FTSE4Good Index Series,³⁷ and the Dow Jones Sustainability Indexes.³⁸ These efforts to develop formal evaluation tools are supplemented and influenced by media, NGOs, and activist investigations and communications.

Despite the availability of these evaluation tools, they remain incomplete due to imperfect information because obtaining perfect information is unlikely and extremely costly. Moreover, the evaluation tools operate within a market system wherein many actors are motivated, wholly or partly, by profit-maximizing goals that may conflict with sustainability aims. Similarly, civil society initiatives aimed at "empowering" stakeholders (e.g., consumers and investors) rely on comparative tools to analyze firm behavior. Yet these comparative tools cannot escape the problem of viewpoint subjectivity, and all are limited by less than complete information.

The Western metrics used to shape CSR stand in contrast to China's approach to CSR policy because the latter is firmly shaped towards a variety of policy objectives by Communist Party state institutions. For this reason some see "CSR as a form of government."³⁹ Civil society has been important in shaping the direction of public CSR policy by raising awareness of CSR failures and increasing public concern over CSR scandals such as food and drug safety failures, and environmental damage.⁴⁰ While it may not be

32. VOLUNTARY PRINCIPLES FOR SECURITY & HUMAN RIGHTS, <https://www.voluntary-principles.org> (last visited Feb. 15, 2021).

33. THE EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE, <http://eti.org> (last visited Feb. 15, 2021).

34. THE EQUATOR PRINCIPLES, <https://equator-principles.com> (last visited Feb 15, 2021).

35. Gond et al., *supra* note 13, at 646.

36. *MSCI Environmental, Social and Governance Indexes*, MORGAN STANLEY CAPITAL INT'L, <https://www.msci.com/our-solutions/esg-investing/esg-indexes> (last visited Feb. 15, 2021).

37. FTSE RUSSEL FOR GOOD NEWS INDEX SERIES, <https://www.ftserussell.com/products/indices/ftse4good> (last visited Feb. 15, 2021).

38. DOW JONES SUSTAINABILITY INDICES, <https://www.spglobal.com/esg/csa/indices/index> (last visited Feb. 15, 2021).

39. Gond et al., *supra* note 13, at 646.

40. Alex L. Wang, *Explaining Environmental Information Disclosure in China*, 44 *ECOLOGY L. Q.* 865 (2018); Andreas Fulda et al, *New Strategies of Civil Society in China: A Case Study of the Network Governance Approach*, 21 *J. OF CONTEMP. CHINA* 675 (2012); Samson Yuen, *Friend or Foe?: The Diminishing Space of China's Civil Society*, 2015(3) *CHINA PERSP.* 51 (2015) (H.K.); Jennifer Hsu & Reza Hasmath, *The Local Corporatist State*

accurate to declare that civil society “has been conspicuously absent as a driver of CSR in China,”⁴¹ it remains true that the role of Chinese civil society in shaping CSR is itself subject to, and controlled by, government mandate.⁴² Authoritarian control of the CSR agenda in China can be seen as supplementing the imperfect information made available through market-based CSR mechanisms. It does this by establishing expensive bureaucratic and detailed information collection and investigation processes with regulatory backing. But just like surveillance capitalism,⁴³ surveillance socialism⁴⁴ has never been completely objective in its decision-making processes. Not only is the nationalist agenda of the SCS itself subjective, but it remains impossible to eradicate discretionary space or bias from the system completely. On

and *NGO Relations in China*, J. OF CONTEMP. CHINA 516 (2014); Jude Howell, *Civil Society, Corporatism and Capitalism in China*, 11 J. OF COMP. ASIAN DEV. 271 (2012).

41. Gond et al., *supra* note 13 at 658.

42. See, e.g., Ministry of Civil Affairs of the People’s Republic of China, Minzhengbu Bangongting Guanyu Yinfa “Minzhengbu 2019 Nian Lifa Gongzuo Jihua” de Tongzhi (民政部办公厅关于印发《民政部2019年立法工作计划》的通知) [Notice of the General Office of the Ministry of Civil Affairs of the People’s Republic of China on Issuing 2019 Legislative Work Plan], <http://www.mca.gov.cn/article/gk/wj/201907/20190700018304.shtml>; see Shehui Zuzhi Xinyong Xinxi Guanli Banfa (社会组织信用信息管理办法) [Measures for Administration of Information on the Credit of Civil Society Organizations] (promulgated by the Ministry of Civil Affairs of the People’s Republic of China, Jan. 24, 2018, effective Jan. 24, 2018) St. Council Gaz., May 10, 2018, at 24, http://www.gov.cn/gongbao/content/2018/content_5288822.htm (China); see also Wang, Yong (王勇), *Draft of new regulations on the registration of social organizations to be submitted to the State Council*, CHINA DEVELOPMENT BRIEF (Aug. 13, 2019), <http://chinadevelopmentbrief.cn/reports/news/draft-of-new-regulations-on-the-registration-of-social-organizations-to-be-submitted-to-the-state-council/>; China Law Translate, *Measures on the Management of the Social Organizations’s Credit Information*, CHINA LAW TRANSLATE (Feb. 1, 2018), <https://www.chinalawtranslate.com/en/measures-on-the-management-of-the-social-organizations-credit-information/>.

43. See generally SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER* (2019) (“[Surveillance capitalism is] the unilateral claiming of private human experience as free raw material for translation into behavioral data. These data are then computed and packaged as prediction products and sold into behavioral futures markets — business customers with a commercial interest in knowing what we will do now, soon, and later.”); see also John Laidler, *High Tech Is Watching You*, HARV. GAZETTE (Mar. 4, 2019), <https://news.harvard.edu/gazette/story/2019/03/harvard-professor-says-surveillance-capitalism-is-undermining-democracy/>.

44. Jon Mason et al., *Questioning the Scope of AI Standardization in Learning, Education and Training*, 8(2) J. OF ICT STANDARDIZATION 107 (2020) (explaining surveillance socialism has a similar meaning as surveillance capitalism, with the crucial difference being that the final customer for detailed data derived from human and business conduct is the state, and the data is obtained and used for state objectives, rather than commercial purposes) (Den.); see also John Torpey, *From Surveillance Communism to Surveillance Capitalism and Beyond*, FORBES (Nov. 8, 2019), <https://www.forbes.com/sites/johntorpey/2019/11/08/from-surveillance-communism-to-surveillance-capitalism-and-beyond/?sh=7bf7e8ea3d33>.

the contrary, the artificial intelligence (AI) infrastructure underpinning the SCS threatens to entrench systemic biases, in much the same way that technologies developed and used in Western systems have been shown to do.⁴⁵

II. Relational Governance, CSR, and Social Capital Theory

Relational governance studies have sought to find a “useful, comprehensive theory of the firm in society.”⁴⁶ In the course of this search, researchers have developed concepts of trust, reputation, and legitimacy as particularly useful in understanding modern CSR.⁴⁷ Some studies explore the boundaries of trust, reputation, and legitimacy using concepts such as “social license to operate.”⁴⁸ There also exists a growing body of work recognizing the usefulness of the social capital concept, not least because of its rich tradition of understanding why and how to give value to (evolving) relationships of trust in society,⁴⁹ and the role of trust in shaping CSR.⁵⁰ The concept

45. E.g., Jeff Larson et al., *How We Analyzed the COMPAS Recidivism Algorithm*, PROPUBLICA (May 23, 2016), <https://www.propublica.org/article/how-we-analyzed-the-compas-recidivism-algorithm>; Simon Chesterman, *Through a Class Darkly: Artificial Intelligence and the Problem of Opacity*, AM. J. COMP. L. (2020).

46 Benjamin A. Neville et al., *Stakeholder Saliency Revisited: Refining, Redefining and Refueling an Underdeveloped Conceptual Tool*, 102(3) J. BUS. ETHICS, 357 (2011); See also *Statement on the Purpose of a Corporation*, BUS. ROUNDTABLE (Aug. 19, 2019), <https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans>; JENA MARTIN & KAREN E. BRAVO, *THE BUSINESS AND HUMAN RIGHTS LANDSCAPE: MOVING FORWARD, LOOKING BACK* (2015); Klaus J. Zink, *Stakeholder Orientation and Corporate Social Responsibility As A Precondition For Sustainability*, 16(8-9) TOTAL QUALITY MGMT. & BUS. EXCELLENCE, 1041 (2005) (U.K.).

47. Dirk Matten & Jeremy Moon, *Reflections on the 2018 Decade Award: The Meaning and Dynamics of Corporate Social Responsibility*, 45(1) ACAD. MGMT. REV. 7, 11 (2020).

48. E.g., Jinua Cui et al., *Community Religion, Employees and the Social License to Operate*, 136(4) J. BUS. ETHICS 775 (2016); Pratima Bansal et al., *The Extensiveness of Corporate Social and Environmental Commitment Across Firms Over Time*, 35(7) ORG. STUD. 949 (2014); Philip H. Kim & Mingxian Li, *Seeking Assurances When Taking Action: Legal Systems, Social Trust, and Starting Business in Emerging Economies*, 35(3) ORG. STUD. 359 (2013); David Weitzner & Yuval Deutsch, *Understanding Motivation and Social Influence in Stakeholder Prioritization*, 36(10) ORG. STUD. 1337 (2015).

49. Frane Adam & Borut Roncevic, *Social Capital: Recent Debates and Research Trends*, 42 SOC. SCI. INFO. 155 (2003); Tristan Claridge, *Social Capital and Natural Resource Management: An Important Role for Social Capital?* (2004) (M.S. thesis, University of Queensland).

50. E.g., Chun Keung Hoi et al., *Community Social Capital and Corporate Social Responsibility*, 152 J. BUS. ETHICS 647 (2018); Yeon S. Ahn & Dong-Jun Park, *Corporate Social Responsibility and Corporate Longevity: The Mediating Role of Social Capital and Moral Legitimacy in Korea* 150(3) J. BUS. ETHICS 117 (2018); Jerry X. Cao et al., *Social Capital, Informal Governance, and Post-IPO firm Performance: A Study of Chinese Entrepreneurial Firms*, 134(4) J. BUS. ETHICS 529 (2016).

of *social capital* is used in this paper to provide a useful comparative contrast to the concept of *social credit* in China's SCS. Both attribute value to social relationships of trust. And both use discourses of *trustworthiness* to explore the nature and extent of that value. *Social capital* is commonly theorized as a collective asset in the form of norms (values) and beliefs shared through social networks (relationships) of trust that facilitate collective action for mutual benefits.⁵¹ Social capital theory has increasingly been drawn upon by organizational scholars seeking to understand the how and why of analyzing and measuring social capital at the level of the organization, and how social capital may facilitate value creation by firms.⁵² These theoretical models are rooted in the belief that social relations are valuable resources.⁵³ Investment in social trust, norms, and informal networks can—according to social capital theory—generate additional value for firms as much as for individuals.⁵⁴

The World Bank's Social Capital Initiative defines social capital broadly to allow for the existence of harmful or damaging social capital: "the institutions, relationships, attitudes, and values that govern interactions among people and contribute to economic and social development."⁵⁵ It also recognizes social capital as central to the evolving role of business in society, and business' contribution to sustainable development—the "process whereby future generations receive as much or more capital per capita as the current generation has available."⁵⁶ Traditionally this has included natural capital, physical or produced capital, and human capital as the wealth on which economic development and growth are based. It is now recognized that these three types of capital only partially determine the process of economic growth because they overlook the how economic actors interact and organize themselves to generate growth and development. The missing link is social capital.⁵⁷

51. Humnath Bhandari & Kumi Yasunobu, *What is Social Capital? A Comprehensive Review of the Concept*, 37(3) ASIAN J. SOC. SCI. 480, 480 (2009).

52. Janine Nahapiet & Sumantra Ghoshal, (1998). *Social Capital, Intellectual Capital, and the Organizational Advantage*, 23(2) ACAD. MGMT REV. 242 (1998); Wenpin Tsai, *Knowledge Transfer in Intraorganizational Networks: Effects of Network Position and Absorptive Capacity on Business Unit Innovation and Performance*, 44(5) ACAD. MGMT J. 996 (2001).

53. Bob Kijkuit & Jef Van den Ende, *With a Little Help from Our Colleagues: A Longitudinal Study of Social Networks for Innovation*, 31(4) ORG. STUD. 451 (2010); Christiaan Grootaert & Thierry van Bastelaer, *Understanding and Measuring Social Capital: A Synthesis of Findings and Recommendations from the Social Capital Initiative 1*, 7 (World Bank, Soc. Cap. Initiative Working Paper No. 24, 2001).

54. Indre Maurer et al., *The Value of Intra-organizational Social Capital: How it Fosters Knowledge Transfer, Innovation Performance, and Growth*, 32(2) ORG. STUD. 157 (2011).

55. Grootaert & van Bastelaer, *supra* note 53, at 2 n.4.

56. Grootaert & van Bastelaer, *supra* note 53.

57. Grootaert & van Bastelaer, *supra* note 53.

The importance of social capital is often most acutely realized when it is lost or damaged. Some of the more well-known instances of global firms incurring social capital losses include BP following the Deepwater Horizon oil spill in the Gulf of Mexico (2010); the Wal-Mart bribery-in-Mexico scandal exposed in 2012,⁵⁸ and the Volkswagen's emissions control scandal affecting its global markets from 2015.⁵⁹ Loss of social capital can be industry-wide, following exposure of systemic misconduct and irresponsibility in Australia's banking and finance sector.⁶⁰ It can also have political, as well as governance, environmental, and social aspects—such as China-linked firms suffering major losses due to recent politically driven social unrest in Hong Kong.⁶¹ The Hong Kong experience illustrates the damaging impacts of negative social capital that arise when the social cohesion upon which business depends to manage political risk is damaged.

There are several possible approaches to examining the loss of value in organizational social capital. Wang and Li theorize corporate loss of social capital in terms of damage to reputation-based firm-specific advantage (FSAs).⁶² Reputation captures the value of stakeholders' assessment of a firm's overall reliability and trustworthiness in the global market.⁶³ Reputation is an important component in building the network ties with which organization-based individuals and groups build links to other social actors, while trust is an important component in maintaining such ties. The concepts of trust, reputation, and creditworthiness are common elements at the core of both *social capital*, as discussed in Western literature, and the *social credit*

58. David Barstow, *Wal-Mart Hushed Up a Vast Mexican Bribery Case*, N.Y. TIMES (Apr. 21, 2012), <https://www.nytimes.com/2012/04/22/business/at-wal-mart-in-mexico-a-bribe-inquiry-silenced.html>.

59. *Case Study: Volkswagen*, REPRISK (2020), <https://www.reprisk.com/news-research/year:2020#volkswagen>.

60. *Final Report: Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry*, COMMONWEALTH OF AUSTL. (Feb. 1, 2019), <https://www.royalcommission.gov.au/sites/default/files/2019-02/fsrc-volume-1-final-report.pdf>. See James Eyers & James Frost, *The Four Things Hayne Changed*, AUSTRALIAN FINANCIAL REVIEW (Jan. 31, 2020), <https://www.afr.com/companies/financial-services/the-four-things-hayne-changed-20200129-p53vnr>.

61. Kirsty Needham, *Chinese Companies Targeted as Wave of Destruction Hits Hong Kong*, SYDNEY MORNING HERALD (Oct. 21, 2019), <https://www.smh.com.au/world/asia/chinese-companies-targeted-as-wave-of-destruction-hits-hong-kong-20191021-p532jp.html>.

62. Stephanie Lu Wang & Dan Li, *Responding to Public Disclosure of Corporate Social Irresponsibility in Host Countries: Information Control and Ownership Control*, 50 J. INT'L BUS. STUD. 1283 (2019).

63. E.g., Davide Fiaschi et al., *Overcoming the Liability of Origin by Doing No Harm. Assessing Emerging Country Firms' Social Irresponsibility as They Go Global*, 52(4) J. OF WORLD BUS. 546 (2017); Steven L. Wartick, *Measuring Corporate Reputation: Definition and Data*, 41(4) BUS. & SOC'Y 371 (2002); Charles Fombrun & Mark Shanley, *What's in A Name? Reputation Building and Corporate Strategy*, 33(2) ACAD. OF MGMT J. 233 (1990).

at the core of China's SCS. That is not to say that trust alone can be equated with either *social capital* or *social credit*. As Claridge points out, "trust is a highly contextualized decision regarding the trustworthiness of potential partners, largely independent of the elements that are said to be part of social capital."⁶⁴ Likewise, while *trustworthiness* lies at the theoretical core of the system laid out in the 2014 Outline Plan for the SCS, the SCS as now emerging is composed of far more complex series of governance processes and tools than the words trust and trustworthiness normally imply.

Social credit as now used in discussions of various aspects of the SCS has taken on a broad meaning more akin to "public trust," and often translated as *creditworthiness*. According to the 2014 Outline plan: "Raising the level of creditworthiness in commercial affairs is a key part of establishing the social credit system."⁶⁵ *Creditworthiness* is seen as a basic requirement for effectively upholding commercial relations, lowering commercial operating costs, and effectively improving the commercial environment. Data collection and data analysis tools are deemed essential to achieving these aims.

Similarly, Western market economy efforts to evaluate and understand social capital have developed several macro-level indexes and tools, including:

- i. World Values Survey (including the European Values Survey);⁶⁶
- ii. General Social Survey;⁶⁷
- iii. Global Social Capital Survey;⁶⁸
- iv. Index of National Civic Health in the United States;
- v. University of Minnesota Survey;⁶⁹

64. Tristan Claridge, *Criticisms of Social Capital Theory: And Lessons For Improving Practice, Social Capital Research, SOC. CAP. RSCH. & TRAINING* (Apr. 20, 2018) (N.Z.), <https://www.socialcapitalresearch.com/criticisms-social-capital-theory-lessons/>. See also ROSALIND EDWARDS ET AL., *ASSESSING SOCIAL CAPITAL: CONCEPT, POLICY, PRACTICE* (2006).

65. Shehui Xinyong Tixi Jianshe Guihua Gangyao (2014-2020Nian) (社会信用体系建设规划纲要 (2014—2020年)) [Outline of the Plan for the Building of Social Credit (2014-2020)] (promulgated by the St. Council, June 14, 2014, effective June 14, 2014) St. Council Gaz. July 10, 2014, at http://www.gov.cn/gongbao/content/2014/content_2711418.htm (China). English translation available at Chinalawtranslate.com.

66. Ronald Inglehart et al., *World Values Surveys & European Values Surveys, 1981-1984, 1990-1993, and 1995-1997*, ICPSR 2790 (Feb. 2000), https://www.cms.fss.ualval.ca/upload/pol/fichiers/manuel_wvs.pdf.

67. *General Social Survey*, NAT'L OP. RSCH. CTR. AT U. CHI. (2020), <https://gss.norc.org/>.

68. Deeta Narayan & Michael F. Cassidy, *A Dimensional Approach to Measuring Social Capital: Development and Validation of a Social Capital Inventory*, 49(2) CURRENT SOCIO. 59 (2011).

69. Scott Chazdon et al., *Developing and Validating University of Minnesota Extension's Social Capital Model and Survey* (U. of Minn., Oct. 2013), <https://conservancy.umn.edu/handle/11299/171657>.

- vi. World Bank Social Capital Assessment Tool (SOCAT);
- vii. The Human and Social Capital Protocol.⁷⁰

Many of these indices and assessment tools are increasingly dependent on artificial intelligence (AI) for data collection and analysis. Increasingly inter-connected and knowledge-dependent global business operations are also using AI in their environmental, social, and political risk analysis.⁷¹ The United Nations Guiding Principles outline a range of tools that can be used for such assessments.⁷² It is therefore increasingly necessary for organizations to understand what forms of data and data analysis are most compatible with the purposes driving the data collection—such as the desire to minimize the firm’s negative social and environmental externalities. When global organizations assert their desire to pursue and fulfill sustainability goals, their claims are often met with skeptical concerns that executive proclamations are more about public image building than about real change in practices on the ground. Internationally recognized practices and standards for measuring social capital and CSR more broadly are potentially an important tool for addressing such concerns. However, before examining the promises and perils of using big data and AI in social capital and CSR evaluations, it is useful to provide some background to Chinese understandings of CSR.

III. Background to CSR with Chinese Characteristics

Since 2006, China’s *Company Law* (in Article 5) has included a requirement for all companies to “observe social morals and commercial ethics, persist in honesty and good faith, accept supervision by the government and the public, and assume social responsibility.”⁷³ In 2006 also, the Chinese Communist Party at its sixth plenum of the Sixteenth Party Central Committee set the definitive requirements for companies to implement CSR as part of a general reinforcement to its Building Harmonious Society policy of 2004.⁷⁴ In 2008 the State-Owned Assets Supervision and Administration Commission, a powerful body overseeing all central-level State-Owned

70. *The Human and Social Capital Protocol*, SOC. & HUM. CAP. COAL. (2019), <https://capitalscoalition.org/capitals-approach/social-human-capital-protocol/>.

71. MARTIN & BRAVO, *supra* note 46.

72. UNHCR, *supra* note 59. See HANDBOOK ON HUMAN RIGHTS IMPACT ASSESSMENT (Nora Götzmann ed., 2019).

73. See *Zhonghua Renmin Gongheguo Gongsifa* (中华人民共和国公司法) [Company Law of the People’s Republic of China] (promulgated by Nat’l People’s Cong., Dec. 29, 1993, effective July 1, 1994, amended in 1999, 2004, 2005, 2013, and 2018), 336 Standing Comm. Nat’l People’s Cong. Gaz. 790 (China).

74. Gond et al., *supra* note 13, at 650.

Enterprises (SOEs), required these firms to establish CSR management systems.⁷⁵ State agencies have issued numerous “opinions” and “guidelines,” many particularly aimed at regulating Chinese firms’ conduct abroad.⁷⁶ These measures direct firms to comply with local laws and customs, protect the environment, show “morality” in business dealings and fulfill their social responsibilities in the host countries.⁷⁷

The binding nature and practical effect of these measures remain unclear.⁷⁸ Opinions may be deemed “soft law,” but they also reflect policies that the Chinese state is pursuing and form an integral part of the regulatory infrastructure supported by and interacting with the SCS. Big corporations often fail to meet the highest standards of CSR, so having government actors regulate compliance with CSR standards is not itself a bad thing. The problem in China is not that the state is imposing CSR on large firms, but rather that CSR is being defined “by the Communist Party and not by society at large.”⁷⁹ In this manner, CSR policy in China is “understood as another tool of state obligation.”⁸⁰

75. Yi-Chun Chen et al., *The Effect of Mandatory CSR Disclosure on Firm Profitability and Social Externalities: Evidence from China*, 65(1) J. OF ACCT. & ECON. 169 (2018).

76. E.g., Mimi Zou, *Corporate Social Responsibility on the Belt and Road*, AUSTL. INST. OF INT’L AFF., (Jan. 29, 2019), <http://www.internationalaffairs.org.au/australianoutlook/corporate-social-responsibility-belt-road/>; *Safeguarding People and the Environment in Chinese Investment*, INCLUSIVE DEV. INT’L, (2nd ed. 2017), https://www.inclusivedevelopment.net/wp-content/uploads/2020/01/2019_idi_china-safeguards-guide-final.pdf; BENOIT VERMANDER, *CORPORATE SOCIAL RESPONSIBILITY IN CHINA: A VISION, AN ASSESSMENT AND A BLUEPRINT* (World Scientific, 2014); See Shangshigongsi Zhili Zhunze (上市公司治理准则) [Code of Corporate Governance for Listed Companies] (promulgated by China Securities Regulatory Commission., Sept. 30, 2018, effective Sept. 30, 2018), <http://www.csrc.gov.cn/pub/zjhpublic/zjh/201809/P020180930584077967335.pdf> (China). English translation available at: http://www.csrc.gov.cn/pub/csrc_en/laws/rfdm/DepartmentRules/201904/P020190415336431477120.pdf; *China Securities Regulatory Commission to Include “Party Development Work” into Corporate Articles of Publicly Traded Companies*, CHINASCOPE (June 15, 2018), <http://chinascope.org/archives/15318>.

77. Zou, *supra* note 76; INCLUSIVE DEV. INT’L, *supra* note 76; VERMANDER, *supra* note 76; Shangshigongsi Zhili Zhunze (上市公司治理准则), *supra* note 76; CHINASCOPE, *supra* note 76.

78. Zou, *supra* note 76.

79. See Arthur Sullivan, *China’s Corporate Social Credit System Spooks European Companies*, DEUTSCHE WELLE (Aug. 28, 2019), <https://www.dw.com/en/chinas-corporate-social-credit-system-spooks-european-companies/a-50200050> (quoting Steve Tsang, director of the SOAS China Institute at the University of London) (Ger.).

80. See generally Larry Catá Backer, *Social Credit and Foreign Enterprises Along the Silk Road*, Remarks Prepared for a Lecture Delivered at the Institute for East Asian Studies of the University of Cologne (Oct. 10, 2019), <http://www.backerinlaw.com/Site/wp-content/uploads/2019/10/Social-Credit-and-Foreign-Enterprises-Along-the-Silk-Road.pdf>.

At the vanguard of shaping CSR with Chinese characteristics is the Party, not least because of the major role it plays in the management of Chinese SOEs.⁸¹ The Party's Organization Department selects senior party officials as the senior managers of SOEs. An amendment to the Party's Constitution in 2017 (article 33), requires a SOEs Party Committee to be consulted by the enterprise's management on all major issues.⁸² Over the past few years, there has also been an acceleration of "party-building" in private firms.⁸³ Moreover, it is through its control of complex networks of relationships with SOEs and private firms that China's Party-state strategically exploits new and rapidly developing technologies, including AI, that has unprecedented transformative effects on industry, economy, and society.⁸⁴

Regulatory control over business decision making, business life, and business behavior in China has now reached the stage where "CSR with Chinese characteristics" has morphed CSR into a form of authoritarian governance. A key feature of this authoritarian governance is the use and extensive reach of a sophisticated AI-driven system for collecting and analyzing information about every aspect of business life and behavior. So far, the CSR literature has neglected almost entirely the role of AI. Any attempt to examine Chinese CSR under President Xi Jinping, however, cannot ignore the central role of AI.

IV. Digital Challenges: The Datafication and Commodification of Trust and Relationships

A growing body of literature examines the impacts of big data analytics on different aspects of daily life and business operations.⁸⁵ New forms of mass data collection and aggregation, and new forms of algorithmic interpretation and predictive modelling are shifting the relationship between civil society, business organizations, and government in ways that are not always

81. Zou, *supra* note 76.

82. CHINASCOPE, *supra* note 76; Shangshigongsi Zhili Zhunze (上市公司治理准则), *supra* note 76.

83. CHINASCOPE, *supra* note 76; Shangshigongsi Zhili Zhunze (上市公司治理准则), *supra* note 76.

84. Zou, *supra* note 76.

85. E.g., ZUBOFF, *supra* note 43; MICHAEL P. LYNCH, *THE INTERNET OF US: KNOWING MORE AND UNDERSTANDING LESS IN THE AGE OF BIG DATA* (2016); Rana Foroosh, *Big Tech Has Moved from Offering Utopia to Selling Dystopia*, FIN. TIMES, Nov. 3, 2019, <https://www.ft.com/content/78d78b7c-fbfc-11e9-a354-36acbbb0d9b6>; VIKTOR MAYER-SCHÖNBERGER & KENNETH CUKIER, *BIG DATA: A REVOLUTION THAT WILL TRANSFORM HOW WE LIVE, WORK, AND THINK* (2013).

either predictable or positive.⁸⁶ Warnings have been expressed within national and international forums about the dangers for human rights when data and predictive modelling take precedence over human judgment.⁸⁷ It is argued that the logic prioritized by predictive analysis is inevitably biased because the datasets to which algorithms are applied are biased. Even datasets with billions of pieces of information do not capture the fullness of people's lives or the diversity of their experiences.⁸⁸ In addition, big data is changing human behavior in society in ways not yet fully understood.⁸⁹ This paper argues that each of these dangers applies equally to scholars working with social capital theory, particularly if big data is being used to analyze and improve the value of organizational social capital, or to alter organization behavior linked to its social capital.

Social capital scholars have explored the potential uses and benefits of AI. Studies of social capital are increasingly using AI, data analytics, and data mining as tools for measuring and analyzing social capital and its consequences.⁹⁰ In a related area, the Deloitte Social Impact Measurement Model provides a machine-learning model programmed to estimate the social impact of corporate investments at the local level in the United States.⁹¹ As further discussed below, China is perhaps the country most advanced in the use of society-wide data analytics for a range of purposes, including the establishment of a nationwide SCS.

86. Philip Alston, *Report of The Special Rapporteur on Extreme Poverty and Human Rights*, U.N. Doc. A/74/48037 (Oct. 11, 2019), https://www.ohchr.org/Documents/Issues/Poverty/A_74_48037_AdvanceUneditedVersion.docx; MAYER-SCHÖNBERGER & CUKIER, *supra* note 85.

87. *E.g.*, Alston, *supra* note 86; MACHINES CAN LEARN, BUT WHAT WILL WE TEACH THEM?: ETHICAL CONSIDERATIONS AROUND ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (Chartered Acct. Austral. & N.Z., 2018), <https://www.charteredaccountantsanz.com/-/media/746d9bb465154cbb891f147eacde869d.ashx>; Lee Rainie & Janna Anderson, *Code-Dependent: Pros and Cons of the Algorithm Age*, PEW RESEARCH CENTER (Feb. 8, 2017), <https://www.pewresearch.org/internet/2017/02/08/code-dependent-pros-and-cons-of-the-algorithm-age/>.

88. Rainie & Anderson, *supra* note 87.

89. ZUBOFF, *supra* note 43.

90. Nathan Eagle, et al., *Network Diversity and Economic Development*, 328 SCI. 1029 (2010), <https://doi.org/10.1126/science.1186605>; Nahed Azab & Mohamed Elsherif, *A Framework For Using Data Analytics To Measure Trust In Government Through Social Capital Generated Over Governmental Social Media Platforms*, PROC. 19TH ANN. INT'L CONF. ON DIGIT. GOV'T RES.: GOVERNANCE DATA AGE, Art. 11 (May 2018), <https://doi.org/10.1145/3209281.3209331>; Jar-Der Luo et al., *Big Data Research Guided by Sociological Theory: A Triadic Dialogue Among Big Data Analysis, Theory, and Predictive Models*, 6 J. OF CHINESE SOCIO. Art. 11 (2019) (China).

91. Steven Ellis et al., *Social Capital: Measuring the Community Impact of Corporate Spending*, 24 DELOITTE REV. (2019), https://www2.deloitte.com/content/dam/insights/us/articles/4945_Social-capital-corporate-spending/DI_DR24_Social-Capital.pdf.

The use of AI to measure social capital is typically justified by the desire to improve the volume, depth, range, and accuracy of the data informing an organization's understanding of its embeddedness in local communities where the organization operates and the value of its related networks. Big data may also satisfy the desire to better understand the changing dynamics of relationships between community, business, and government, thereby supporting more informed decision-making.⁹²

As the strategic challenges faced by organizations—and the collaborative strategies designed to address them—become more complex, increasingly sophisticated mechanisms for data collection and analysis are being developed. Modern AI technologies are welcomed by many in the business community as the solution, not least because AI can also provide new tools for measuring and evaluating the success of strategies aimed at enhancing firm-specific value. This paper argues, however, that at the same time as welcoming the benefits offered by AI in measuring, valuing, and enhancing social capital, business and policymakers need to be equally aware of its inherent dangers. In particular, the collection of ever-increasing amounts of data generated by individuals whose interactions in the real world poses a number of major challenges to both trust and reciprocity—both integral to the formation and maintenance of social capital.

The desire to “measure” a firm's social capital impact, and its dependence upon social networks, incentivizes firms to collect as much data as possible to use in that measuring. Such data collection, whatever efforts might be made to anonymize or de-identify it, clearly increases the risks and potential for privacy breaches. While a distinction is often made between “meta-data” on the one hand, and personal information on the other,⁹³ it is a distinction that is often far from clear. Likewise, ownership and other rights connected to “incidental” personal information swept up into a data collection system are rarely well defined.⁹⁴ Regulatory strategies aimed at addressing the impacts of AI on individual privacy are being developed and implemented but remain piecemeal at national or regional level rather than global; and are often inadequate in keeping up with the pace of technological change.⁹⁵ The mere act of data collection also directly impacts society, assuming that society is aware that the process is taking place. As Jeremy

92. Eagle et. al, *supra* note 90; Azab & Elsherif, *supra* note 90; Luo et al., *supra* note 90.

93. Trenton Schreurs & Katrina Mawer, *Metadata and Privacy: Is Your Information Protected?*, LEXOLOGY (Feb. 24, 2017), <https://www.lexology.com/library/detail.aspx?g=d4c3ebfd-39ff-4165-b6e4-cfcdf588fdd0>; Sean MacNiven, *Metadata: Curse or Cure for GDPR Compliance?*, COMMUN DIR. (Mar. 16, 2018), <https://www.communication-director.com/issues/privacy-protection-and-public-debate-gdpr-and-communications/metadata-curse-or-cure-gdpr/#.YF5VZWRKhA>.

94. LYNCH, *supra* note 85 at 95.

95. Schreurs & Mawer, *supra* note 93; MacNiven, *supra* note 93.

Bentham knew when he designed his panopticon, observation affects behavior.⁹⁶ This may be good, such as when the awareness of a hidden security camera deters illegal behavior. But it may also have a negative impact by detracting from individual autonomy when individuals censor their own behavior.

Modern organizations are utilizing digital data not just in the design of business strategies, but within the organization to aid the management of human resource strategies. Here again, the drive to institute metrics may arise from the best of intentions and may initially appear successful. The desire to simplify problems to be solved, or goals to be reached, may lead to a focus on the most easily measurable metrics. But measuring the simple can also become a source of metric dysfunction when the desired outcome is complex.⁹⁷ Most jobs have multiple responsibilities, and most organizations have multiple goals. Giving undue metric weight to one responsibility or goal can lead to deceptive results. It can also mean that inputs are given priority over outcomes. The seductive nature of quantification—the production of numbers and graphs that allow for easy comparisons among people and institutions—can further disguise the distortion of context, history, and meaning that is taking place.⁹⁸

A further challenge digitization presents for the social capital theory arises from the fact that data itself has value and can be sold. The larger and more granular the dataset, the greater its value to potential buyers. Digital technology services are used by their corporate owner or creators to harvest “behavioral surplus,” that can then be sold for profit.⁹⁹ Facebook and Amazon are amongst the most famous examples, collecting large amounts of data about social networks, which they then analyze and package according to the needs of the businesses purchasing the data analytics. The value to the buyer of the data lies in the desire to capitalize upon the most profitable reaches of expanded social networks.¹⁰⁰ However, once individuals in society are treated as potentially profitable units of information, they may no longer be seen as human. The human element that is at the heart of what it means to be a social being can thus be lost. The loss of social autonomy stemming from data-driven automated decision making can be illustrated by the example of automated on-line rating surveys. In online rating surveys, the decision to select a particular level of customer satisfaction may be made freely, but

96. Jacques-Alain Miller, *Le Despotisme de l'Utile: la Machine Panoptique de Jeremy Bentham*, 3 ORNICAR? BULLETIN PERIODIQUE DU CHAMP FREUDIEN 3 (1975) (Fr.).

97. Kirsten Martin, *Ethical Implications and Accountability of Algorithms*, 160 J. BUS. ETHICS 835 (2019).

98. Martin, *supra* note 97; JERRY Z. MULLER, *THE TYRANNY OF METRICS* (2018).

99. ZUBOFF, *supra* note 43.

100. ZUBOFF *supra* note 43, at 278-82.

decision itself not fully autonomous.¹⁰¹ While survey ratings may capture the extent of a brand's reputation, they can rarely capture the resilience of that reputation—how easily it might be fractured or destroyed. The information produced by digital analytics may not lead to a genuine understanding of the nature of the organization's impacts or dependencies.¹⁰²

Another significant challenge digital technology presents for social capital theory stems from its use by businesses to move from “recognizing” the value of social trust and networks to the deliberate “creation” of new forms of profit-generating social capital. One of the processes through which this transformation occurs is known as gamification—a process whereby commercial intent is disguised as a game. The process of gamification is explained by Zuboff using the product developed by Niantic Labs known as Pokémon Go. The commercial intent behind Pokémon Go is the desire to actuate human behavior quickly and at scale, while driving it toward guaranteed outcomes. Pokémon Go allowed its makers to closely track the movements of game-playing participants while also facilitated the shaping of behavior.¹⁰³ The game's true value to the wider business community became obvious as local business owners began to use elements of the “game,” including sponsorships and “Lure Modules,” to attract increased foot traffic. The success of Pokémon Go for its producers lay in the increased sales volume and customer base it could provide for local businesses paying to associate themselves with the game.¹⁰⁴

Behavior is equally being shaped in China. The only substantial difference between China and Western markets is that in Western markets the process is controlled by private corporations, while in China the process is controlled by a socialist, one-party state. In both contexts, digital data is used as a tool to both measure and increase the social value of business relations. The challenge for theory is to understand how technology facilitates and influences relationships of governance. Governance is an important source of social capital since it provides a framework for establishing society-wide shared understandings and social norms. At the societal level, strong coordinating institutions are important. They act like a glue that keeps modern society together by producing universally understood rules.¹⁰⁵ They provide a degree of confidence in how others will act, especially when institutions can

101. LYNCH, *supra* note 85, at 102.

102. Chartered Acct. Austl. & N.Z., *supra* note 87.

103. ZUBOFF, *supra* note 43, at 309-19.

104. ZUBOFF, *supra* note 43, at 309-19.

105. Alejandro Portes & Erik Vickstrom, *Diversity, Social Capital, and Cohesion*, 37(1) ANN. REV. SOCIO. 461 (2011).

“compel,” directly or indirectly, the observance of these rules.¹⁰⁶ Throughout much of the world it is non-state action, such as NGO action, accreditation and auditing, and media reporting that helps generate an environment where information is trusted, translated into assessments of, and consequences (rewards or punishments) for, organizations. In China, state involvement drives these processes, making them far more extensive in coverage. The success of such a system in generating trust depends on the dominant attitude and beliefs of people and organizations towards the system.¹⁰⁷

The AI-driven nature of China’s SCS has been examined by writers highlighting the “Big Brother” aspects of the SCS,¹⁰⁸ including its application to corporations.¹⁰⁹ A relational governance perspective on China’s corporate SCS highlights tensions between China’s use of big data to assess the “social credit” of organizations and attempts by analysts and organizations to utilize the tools of big data in their assessments of corporate social capital and fulfilment of CSR criteria more generally. It is necessary to understand the full extent of these tensions given the sheer size and ambition of China’s expansionary policy initiatives, including the Belt and Road Initiative (BRI) which would effectively extend China’s SCS beyond China’s territorial borders into societies with very different perceptions of social relations and the behaviors that give them value.

V. The Politicization of Trust: China’s Social Credit System

China’s SCS is best described as a broad policy project aimed at encouraging individuals, businesses, legal institutions, and the government itself to be more *trustworthy* (守信, *shouxin*) through a mix of measures. The State Council’s 2014 “Notice Concerning the Issuance of the Planning Outline for the Establishment of a Social Credit System 2014-2020” sets out an ambitious program for strengthening integrity in: government affairs, commercial transactions, society, and judicial credibility.¹¹⁰

106. Tristan Claridge, *China’s Social Credit System: An Ambitious Attempt to Build Social Capital*, SOC. CAP. RSCH. & TRAINING (Feb. 3, 2020) (N.Z.), <https://www.socialcapitalresearch.com/chinas-social-credit-system-social-capital/>.

107. Batia Ben Hador, *Three Levels of Organizational Social Capital and Their Connection to Performance*, 36 J. MGMT. DEV. 348 (2017).

108. Min Jiang & King-Wa Fu, *supra* note 1; Grote & Bonomi, *supra* note 9; Yu-Jie Chen et al., “Rule of Trust”: *The Power and Perils of China’s Social Credit Megaproject*, 32 COLUM. J. ASIAN L. 1 (2019).

109. *The Digital Hand: How China’s Corporate Social Credit System Conditions Market Actors*, SINOLYTICS & E.U. CHAMBER COM. CHINA (Aug. 28, 2019), <http://www.europeanchamber.com.cn/en/publications-corporate-social-credit-system>.

110. Shehui Xinyong Tixi Jianshe Guihua Gangyao, *supra* note 65.

The phrase *social credit* (社会信用, *shehui xinyong*) has been described as a “working term” an umbrella category encompassing several moving parts of a broader policy agenda that includes both national initiatives as well as city-level pilot projects that do not generalize to a country-wide scale.¹¹¹ Often the term has been mischaracterized in the Western press due to the emergence of private credit-rating apps by Alibaba (Sesame Credit) and other Chinese firms used by individuals seeking a personal credit rating.

From a hermeneutic viewpoint, the meanings conveyed by the terms *social credit* in English and *shehui xinyong* in Chinese respectively, may be different. The Chinese phrase does not necessarily imply interpersonal relations as in the English word *social* but could easily refer to “the public” or “society.” For example, the Chinese term *shehui ziben* (社会资本, literally *social capital*), refers to financial capital invested by members of the general public. *Social capital* does not share the English meaning (discussed above) of “networks of relationships among people in society creating economic value by facilitating the effective functioning of that society.” Similarly, *xinyong credit*, can mean *believable* as in *jiang xinyong* (讲信用), which literally translates as *talks credit*, but means “one’s speech can be trusted.”

The SCS applies to legal persons (corporations) and other organizations, including NGOs, just as much as it applies to individuals. Every Chinese corporation has a Uniform Social Credit Code, which is a composite 18-digit identification code to which all government data and supplementary information is attached. It is the data attached to the Code that is used to determine social credit ratings. For corporations, the ratings system follows three steps: (i) government definition of rating requirements; (ii) monitoring of companies’ behavior; and (iii) algorithm-based ratings of companies and direct consequences.¹¹²

A. Government Definition of Rating Requirements

Government definitions of rating requirements are found in the over 350 regulations, laws, and policies published by China’s central government

111. Elizabeth M. Lynch, *What’s the T on China’s Social Credit System? - Jeremy Daum Explains - Part 1 of 2*, CHINA L. & POL’Y (Nov. 12, 2018), <https://chinalawand-policy.com/2018/11/12/whats-the-t-on-chinas-social-credit-system-jeremy-daum-explains-part-1-of-2/>; Elizabeth M. Lynch, *What’s the T on China’s Social Credit System? - Jeremy Daum Continues - Part 1 of 2*, CHINA L. & POL’Y (Nov. 13, 2018), <https://chinalawand-policy.com/2018/11/13/whats-the-t-on-chinas-social-credit-system-jeremy-daum-continues-part-2-of-2/>.

112. SINOLYTICS & E.U. CHAMBER COM. CHINA, *supra* note 109.

authorities between 2013 and 2019. Dispersed across this still-growing body of regulatory documents are the topic-specific scale ratings (usually around 30 for a company) and specific requirements (approximately 300 for an MNC) applicable to the business activities of any firm subject to the relevant legal regime.¹¹³ For the most part, regulatory requirements are clearly defined. Lack of transparency arises primarily from the dispersion of the information across a multitude of government documents.¹¹⁴ Government regulations published since 2013 mostly include provisions stating that non-compliance ~~is~~ will be recorded in the SCS database. Through this simple method, a growing body of business regulations covering aspects of market behavior—for example, the *Anti-Unfair Competition Law 2019*,¹¹⁵— are systematically linked into the SCS.¹¹⁶

In addition to specific legal requirements, the SCS uses topic-specific scale ratings linked to regulatory benchmarks. The use of scale ratings changes the regulatory landscape from the traditional clear binary division between legal and illegal, to a continuous scale from bad to good, with shades of grey in between. Even here, the SCS is not imposing new legal obligations, but focusses upon collecting data about compliance with existing obligations.¹¹⁷ While legal obligations are not, for the most part, extended; the consequences of breaching such obligations *are* extended. Thus, non-compliant behavior by one business can affect its business partners, suppliers, and customers. This has the effect of burdening companies “with the responsibility of continuously monitoring their partners’ trustworthiness across the entirety of their business network.”¹¹⁸ Non-complaint behavior by a corporate or other legal person also extends to, and affects, the rating of individual legal representatives of that organization. The monitoring system thus becomes a systemic, self-reinforcing tool through which behavioral standards are socialized through regulatory networks.

113. SINOLYTICS & E.U. CHAMBER COM. CHINA, *supra* note 109.

114. Shazeda Ahmed, *The Messy Truth About Social Credit*, CHINA FILE (Apr. 22, 2019), <https://www.chinafile.com/reporting-opinion/viewpoint/messy-truth-about-social-credit>; SINOLYTICS & E.U. CHAMBER COM. CHINA, *supra* note 109, at 11.

115. See Zhonghua Renmin Gongheguo Fan Buzhengdang Jingzheng Fa (中华人民共和国反不正当竞争法) [Law of the People’s Republic of China Against Unfair Competition] (promulgated by Standing Comm. Nat’l People’s Cong. Gaz., Sept. 2, 1993, effective Dec. 1, 1993, amended in 2017 and 2019) 339 Standing Comm. Nat’l People’s Cong. Gaz. 606 (China).

116. SINOLYTICS & E.U. CHAMBER COM. CHINA, *supra* note 109, at 13.

117. Lynch, *supra* note 111.

118. SINOLYTICS & E.U. CHAMBER COM. CHINA, *supra* note 109, at 13.

B. Monitoring of Companies' Behavior

The second step of corporate SCS is the monitoring of companies' behavior using a full spectrum of advanced technology. Companies within Chinese jurisdiction must transfer ever increasing amounts of required data directly to the central database of the SCS and to different government agencies through several reporting processes. Data so transferred becomes part of the SCS, even if the transfer itself was not directed towards that end; for example, transfers made in the course of regular bureaucratic procedures like license renewals or product certifications. Feedback loops are being generated between the regulator and regulated so that each shapes the other. In this way, the system becomes stronger than its "hard-law" aspects alone. It becomes reinforced by "soft-law" tools of governance—socialization within regulatory networks, and structuring incentives for uncoordinated private actors.

The SCS is, in theory at least, designed to facilitate improved coordination between government inspection agencies responsible for different aspects of business compliance (e.g., environment, labor, etc.). Government inspections are being brought under coordinated management in accordance with the principle "two random selections, one open" (双随机、一公开).¹¹⁹ Both the inspection target and the responsible inspecting official will be randomly selected and matched, theoretically limiting possibilities for preferential treatment. As a basis for the inspectors' selection, government authorities are currently creating "monitoring item catalogues" in which they divide tasks and precisely define which authority and department is responsible for which monitoring task. This is meant to avoid unnecessary duplication of work and facilitate the systematic assessment of government entities and their officials.¹²⁰ It also ensures that officials from diverse institutional environments are socialized according to a standardized system of normative policies and priorities.

C. Algorithm-Based Ratings of Companies and Direct Consequences

Organizations with good social credit histories will find the burden of supervisory interventions and compliance reduced, while those with a poorer inspection record over time will find the opposite. For example, companies named on a blacklist for non-compliance with environmental regulations will find that they become subject to "strengthened" supervision and

119. SINOLYTICS & E.U. CHAMBER COM. CHINA, *supra* note 109, at 14.

120. SINOLYTICS & E.U. CHAMBER COM. CHINA, *supra* note 109.

management by government departments at all levels.¹²¹ Remote and real-time monitoring of market-related metrics such as product performance, emissions, and logistics, including by third-party private companies like Alibaba and Tencent, provide an important complement to government authorized monitoring efforts. The SCS is thus shaping government and governance practices as much as it is shaping the behavior of regulated entities. In this manner, socialization via “soft-law” governance tools exceeds “hard-law” regulations in reach and influence.

Thus, non-compliant behavior by a company in one area of CSR, like tax compliance, will affect the company’s rating in other fields, such as customs clearance or environmental agency inspections. This is the deliberate result of a series of Memoranda of Understanding (MoUs) between large groups of government authorities. Some of these MoUs define rewards for good rating results, but for the time being, the reward mechanisms are less developed than the joint sanctions which are applied to negative ratings. Most MoUs are signed by 20 to 30 government ministries and bureaus and are aimed at mutual recognition of each other’s judgements on a company. Mutual recognition then forms the basis for applying corresponding (joint) sanction(s) on the company concerned. Thus, a rating as a distrusted corporate taxpayer not only leads to tax specific sanctions (e.g., fines) but can also impacts a company’s license approvals, land usage rights, and the travel options of its legal representatives, amongst other things.¹²² Blacklisting, ratings, and rankings thus become additional “soft-law” governance tools with effects extending well beyond the individual enterprises.

The AI-driven nature of “CSR as government” in China is clearly changing the shape of governance as much it is shaping behaviors of the governed. The challenge for the SCS as a system arises from the fact that different government agencies and governance actors are motivated by interests that do not always coincide. The Ministry of Ecology and the Environment is not motivated by the same concerns as the Ministry of Science and Technology. The interests of the State Administration for Market Regulation are not necessarily shared by the Ministry of Agriculture and Rural Affairs. These potential conflicts exist not only in areas of policy and policy implementation, but also throughout more prosaic areas of government funding priorities, personnel allocations, and jurisdictional overlaps. The conflicts also exist at all levels of governance, from national to local, both

121. Guanyu Fabu Hunan sheng Huanjingbaohu Heimingdan (Diyipi) de Tongzhi (关于发布湖南省环境保护黑名单 (第一批) 的通知) [Notice on the issuance of the blacklist of environmental protection in Hunan Province (first batch)] (promulgated by the Ecology and Environment Department of Hunan Province, Apr. 18, 2018), http://sthjt.hunan.gov.cn/sthjt/xxgk/zdly/wrfz/qyhjxypj/201805/t20180514_5011811.html (China).

122. SINOLYTICS & E.U. CHAMBER COM. CHINA, *supra* note 109, at 15.

between levels of the same ministerial portfolio, and between governance agencies at the same level of government. While the systemic consequences arising from such conflicts remain to be seen, it is possible to envision possible scenarios.

The relative size and influence of most businesses compared to individual subjects of the SCS provides a starting point. Businesses, particularly SOEs, may seek to use relationships with relevant government agencies and individual decision-makers within those agencies to their own advantage. This is not an original point to make—there exists entire literature on regulatory capture and how businesses use influence to shape regulatory decision outcomes.¹²³ What is new in the Chinese context is the potential for business leverage to impact the operation of the joint sanctions system under the SCS. Under the principle of joint sanctions, all government authorities who are party to the same MoU agree to levy sanctions not only based on the ratings they are directly responsible for, but also on ratings by other relevant agencies. It is this imposition of consequences that distinguishes the SCS from rating mechanisms found elsewhere. The sanctions, and less often the rewards, agreed upon by government authorities who are party to a joint MoU have a legal basis for their implementation under Chinese law. There is nothing voluntary about them from the viewpoint of those being rated. Yet once the data processing infrastructure is completed, the system will rely on the transfer of accurate data between government agencies. Within such a large and complex system, there is much that can go wrong: both systemically and in relation to data linked to individual entities.

Systemically, the data-driven nature of China's corporate SCS limits, or even excludes, the ability of individual firms to develop and follow a unique CSR strategy besides the state-determined criteria. Within a Party-state defined system of good corporate conduct, there are limited possibilities for individual firms to frame, scope, and apply a nuanced strategy for enhancing the positive social impacts of its operations. Likewise, firms have no incentive to develop unconventional approaches towards, for example, strengthening the resilience of social relationships. Rather, the rational, risk-minimizing strategy for China-based firms of all types will be to adopt a precautionary approach by conforming as much as possible to state plan models and directives. Such an environment has obvious detrimental implications for innovation, adaptive capacity,¹²⁴ experimentation, and individual entrepreneurship. The information asymmetry created by algorithmic credit scoring has two further profound effects.

123. See generally Ernesto Dal Bó, *Regulatory Capture: A Review*, 22 OXFORD REV. ECON. POL'Y 203 (2006) (U.K.).

124. See Mark Pelling & Chris High, *Understanding Adaptation: What Can Social Capital Offer Assessments of Adaptive Capacity?*, 15 GLOB. ENV'T CHANGE 308 (2005) (Neth.).

First, it threatens to entrench systemic biases within firms' recruiting strategies and practices. Recruitment practices may become modified to favor individuals with consistently high social credit scores, including networks counted valuable by the system both within and external to the recruiting firm. This is likely to have a negative influence on the diversity of all types—human capital, social capital, and demographics—with consequences for team effectiveness at all levels from the boardroom down.¹²⁵ For example, in the area of gender diversity, the impact of Chinese policies since 2012 is now obvious. China's ranking in the Global Gender Gap Economic Participation and Opportunity subindex has fallen steadily from 46 in 2010 to 91 in 2019. In the women's Global Gender Gap Political Empowerment subindex, it has fallen from 56th to 95th position over the same period.¹²⁶ Cultural diversity is even more noticeable for its absence, with leadership positions throughout Chinese politics, business, and society occupied almost uniformly by, mostly male, Han Chinese.¹²⁷

Second, the information asymmetry generated by China's SCS compounds power imbalances within the existing system. This in turn makes it more likely that firms will engage in defensive strategies aimed at political merit-making, even if only to mitigate the intrusiveness of government inspection, auditing, and registration processes. It may, for example, become an accepted norm for organizations to cultivate political favor with state officials.¹²⁸ This has been labelled "the gamification of trust,"¹²⁹ and may become, in practice, the politicization of trust, as businesses identify an advantage in developing closer relationships with powerful officials.

Metric fixation invites gaming and leads to dysfunction, particularly when the stakes are high. This was demonstrated in 1975 by two social scientists working independently on opposite sides of the Atlantic. "What has come to be called 'Campbell's Law,' named after the American social psychologist Donald T. Campbell, holds that '[t]he more any quantitative social

125. See Sabina Tasheva & Amy J. Hillman, *Integrating Diversity at Different Levels: Multilevel Human Capital, Social Capital, and Demographic Diversity and Their Implications for Team Effectiveness*, 44 ACAD. MGMT. REV. 746 (2019).

126. WORLD ECONOMIC FORUM, THE GLOBAL GENDER GAP REPORT 2010 104 (2010); WORLD ECONOMIC FORUM, THE GLOBAL GENDER GAP REPORT 2020 125 (2019).

127. See generally Ningyu Tang et al., *Managing Chinese diverse workplace: toward a theory of organizational inclusion*, 8 NANKAI BUS. REV. INT'L 39 (2017) (U.K.); Fang Lee Cooke & Debi S. Saini, *Managing diversity in Chinese and Indian organizations: A qualitative study*, 3 J. CHINESE HUM. RES. MGMT. 16 (2012) (U.K.); Stanley Bruce Thomson et al., *Equality and harmony: diversity management in China*, 13 CHINESE MGMT. STUD. 113 (2019) (U.K.).

128. ROBERT P. WELLER ET AL., RELIGION AND CHARITY: THE SOCIAL LIFE OF GOODNESS IN CHINESE SOCIETIES 70 (2018).

129. See generally Zahy Ramadan, *The Gamification of Trust: The Case of China's "Social Credit"*, 36(1) MARKETING INTELLIGENCE & PLANNING, 93 (2018) (Neth.).

indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor.’ In a variation name for the British economist who formulated it, we have Goodhart’s Law, which states, ‘[a]ny measure used for control is unreliable.’”¹³⁰

China’s SCS’s poses a danger to good corporate governance standards because it replaces existing formal institutions of state, law, and market with a dangerous combination of boundless and uncertain indicators of *trustworthiness*, and the unrestrained use of technology.¹³¹ The danger is that when formal institutions of the state, law, and market no-longer work, organizations relying on these institutions become socially and economically excluded. Meanwhile, those able to draw upon connections and informal tactics, such as bribes, to “bend” or “break” the formal rules will succeed.¹³² A “shadow” network of social capital relationships may develop—much like China’s \$10 trillion shadow banking ecosystem that has evolved to create debtor-creditor relationships outside of the regulated lending sector.¹³³

For organizations willing and able to harvest social credit for commercial success, the logical conclusion of China’s SCS is that the firm itself becomes subordinated to the Party’s larger project ends. At the opposite extreme of Western neo-liberalism’s “there is no such thing as society,” China’s SCS offers a world where there is *only* society, and only one vision of what that society should look like. Individual autonomy becomes subordinated to the collective good. Businesses in such a Party controlled system become implicated in society’s workings—for good and for bad. Commerce can be used to promote environmentally sustainable consumerism, or it can be used to promote nationalistic fervor directed against foreign countries that have displeased Beijing. For example, commercial search engines and social media can be used by various stakeholders in China, including SOEs, to shape nationalism for their own ends.¹³⁴ The logical conclusion of China’s SCS thus becomes a digitally driven, harmoniously networked society operating smoothly to the evolving tune of Party-driven policy directions.

The establishment of data-collecting supervisory instruments and governance networks in China is not necessarily different in scale or kind to the instruments of data-driven governance already established in Western

130. MULLER, *supra* note 98, at 19-20.

131. Chen et al., *supra* note 108, at 1, 35.

132. Richard Rose, *Getting Things Done in an Anti-Modern Society: Social Capital Networks in Russia* vii-23 (The World Bank, Social Capital Initiative Working Paper No. 6, 1998), https://web.worldbank.org/archive/website00522/WEB/PDF/SCI_W-21.PDF.

133. See Bloomberg News, *A Guide to China’s \$10 Trillion Shadow-Banking Maze*, BLOOMBERG (June 8, 2018, 9:30 PM), <https://www.bloomberg.com/news/articles/2018-06-07/a-guide-to-china-s-10-trillion-shadow-banking-maze-quicktake>.

134. See generally Florian Schneider, CHINA’S DIGITAL NATIONALISM (2018).

regulatory systems. The difference lies in the political, social, and economic assumptions upon which the Chinese system is based. The normative bases for constructing and operating China's SCS are not those of Western companies or the states from which they operate.¹³⁵ In many respects, they are incompatible with the political and economic ideals at the heart of the Western political and economic organization. For foreign companies linked into China's SCS, there is also the risk that data harvesting may be redolent with ulterior purposes: commercial, political, or economic. In the absence of robust *social credit*-based mechanisms of accountability for government, especially at the lower levels, it is not clear that the integrity principles at the heart of the SCS, in theory, will be embedded in the practice of lower-level authority (public and private) charged with its implementation. If the SCS has little effect on attitudes and values, cognitive and relational social capital, it may simply result in organizational structures designed to "play the rules of the game" without a cultural change.

An understanding of the social implications of China's corporate SCS is particularly important for the many organizations worldwide potentially, or already in relationships, with Chinese business partners or who are involved in the extensive network of China-sponsored projects along that nation's extensive Belt and Road Initiative (BRI). In light of the sheer reach and scale of the BRI, and the enormous potential for tensions to arise between different social priorities and values in relation to assessing BRI projects, this article concludes with a brief consideration of the implications of the SCS for non-Chinese entities that become BRI stakeholders.

VI. The Social Credit System and China's BRI

Theorizing a CSR perspective on China's corporate SCS is important because of the potential reach of that system beyond China's border through its BRI.¹³⁶ The BRI is by now well known as the nation's long-term national project which aims to establish connective infrastructure facilities in and throughout Central Asia, the Middle East, parts of Europe, and beyond.¹³⁷ National infrastructure projects, including transport and communications infrastructure using AI technologies, are in much demand in many countries

135. Backer, *supra* note 80; Zou, *supra* note 76.

136. Kelsey Munro, *China's Social Credit System 'Could Interfere in Other Nations' Sovereignty'*, THE GUARDIAN (June 27, 2018), <https://www.theguardian.com/world/2018/jun/28/chinas-social-credit-system-could-interfere-in-other-nations-sovereignty>.

137. Backer, *supra* note 80; Zou, *supra* note 76.

along the BRI route.¹³⁸ By 2019, over 68 countries had signed on to BRI projects.¹³⁹ Along with the physical infrastructure of the BRI, China is also exporting its policy and regulatory ‘infrastructure. Under China’s version of State capitalism, the party-state exerts influence on the activities and operating environments of Chinese firms abroad, particularly in sectors where many firms are state-owned, state-invested, or state-connected.¹⁴⁰ Along the BRI, as within China, state and market players have formed often beneficial symbiotic relationships to maximize political and economic gains.¹⁴¹ The state plays an active role in organization capital and labor flows abroad to states that host Chinese investments, which may involve leveraging geopolitical and diplomatic relationships and economic and financial support to host states. It also means that the Chinese vision of party-led corporate good behavior is part of this expansion abroad; along with the SCS infrastructure aimed at supporting this vision.

The Chinese government has sought to sell the BRI as a kind of “global public good,” able to connect economies, people, and cultures from Africa through Asia to Europe.¹⁴² According to the Chinese government, China is committed to ensuring that the BRI contributes to achieving the Sustainable Development Goals and the Paris Agreement goals by promoting “green infrastructure construction, green investment, green finance, and [protection of] the common home for the sake of human survival.”¹⁴³ China’s Ministry of Ecology and Environment is one of over 100 Chinese and international partner institutions forming the BRI International Green Development Coalition (BRIGDC). Non-Chinese partners include the International Institute for Sustainable Development, the environment ministries of 25 countries

138. See JAMES MANYIKA ET AL., DIGITAL GLOBALIZATION: THE NEW ERA OF GLOBAL FLOWS (2016), <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-globalization-the-new-era-of-global-flows>.

139. *The Economist Explains, What Is China’s Belt and Road Initiative?*, THE ECONOMIST (May 15, 2017), <https://www.economist.com/the-economist-explains/2017/05/14/what-is-chinas-belt-and-road-initiative>; John Hurley et al., *Introduction to EXAMINING THE DEBT IMPLICATIONS OF THE BELT AND ROAD INITIATIVE FROM A POLICY PERSPECTIVE* (Ctr. for Glob. Dev. 2016).

140. Zou, *supra* note 76.

141. Min Jiang & King-Wa Fu, *supra* note 1.

142. See generally Jingxia Shi, *The Belt and Road Initiative and International Law: An International Public Goods Perspective*, in INTERNATIONAL GOVERNANCE AND THE RULE OF LAW IN CHINA UNDER THE BELT AND ROAD INITIATIVE 9 (Yun Zhao ed., 2018) (U.K.).

143. *International Institute for Sustainable Development, Coalition Aims to Build Sustainability into Belt and Road Initiative Projects*, INT’L INST. FOR SUSTAINABLE DEV. (Apr. 25, 2019), <https://www.iisd.org/articles/coalition-aims-build-sustainability-belt-and-road-initiative-projects?q=media/coalition-aims-build-sustainability-belt-and-road-initiative-projects>, (citing Xi Jinping, BRI Forum, April 2019).

hosting or potentially hosting BRI projects, and over 60 NGOs and research institutes.¹⁴⁴

Assuming that algorithms can be and will be used to measure actual and potential environmental and social impacts of BRI projects, the question then arises: whose algorithms will be used? If the algorithms driving China's corporate SCS are used, as they likely will be, to assess BRI projects, what might be the longer-term impact on both the project and the assessment? To what extent will alternative assessments, potentially based on guidelines for social capital analysis developed by BRI-project co-funding institutions such as the ADB or World Bank, confirm or contradict China-driven analysis? China's BRI vision is inextricably intertwined with its SCS vision. Both are imbued with a discourse of technological nationalism, and to varying extents, directed by "national champions."¹⁴⁵ It is precisely the technocratic, decontextualized, and nonreflexive nature of China's corporate SCS which renders it particularly insensitive to local social, political, and cultural priorities and sensitivities outside of mainland China—including in BRI partner nations.¹⁴⁶

Yet the advanced nature of the communications technology and data analytics of China's SCS indicates it may well be winning the AI race. Particularly for projects based in developing state BRI partners, China's superior analytics may overwhelm alternative mechanisms and avenues for collecting data about the sustainability performance of BRI projects. The danger is that digitized SCS algorithms may not be culturally sensitive to the impacts of BRI projects outside of China. BRI projects driven by SCS algorithms are more likely to be designed according to a Chinese policy-driven template, and less likely to be amenable to adaption in line with the social, political, and economic realities of the localities where those projects are situated. BRI project managers driven by SCS metrics may be unwilling or unable to tap into, or draw upon, community-based knowledge, networks, and relationships essential to local support and project success.¹⁴⁷

144. See generally GREEN BELT & ROAD INITIATIVE CENTER, <https://green-bri.org/>.

145. Min Jiang & King-Wa Fu, *supra* note 1; SCOTT L. KASTNER ET AL., CHINA'S STRATEGIC MULTILATERALISM: INVESTING IN GLOBAL GOVERNANCE 218 (2019) (U.K.).

146. See Yongmin Bian, *The Role of Environmental Impact Assessment in the Governance of the Nu-Salween River: A Comparative Study of the Chinese and Myanmar Approaches*, in INTERNATIONAL GOVERNANCE AND THE RULE OF LAW IN CHINA UNDER THE BELT AND ROAD INITIATIVE 218 (Yun Zhao ed., 2018) (U.K.).

147. See generally Satu Kähkönen, *Does Social Capital Matter in the Delivery of Water and Sanitation?*, in UNDERSTANDING AND MEASURING SOCIAL CAPITAL: A MULTIDISCIPLINARY TOOL FOR PRACTITIONERS 265 (Christiaan Grootaert & Thierry van Bastelaer eds., 2002); Catherine Reid & Lawrence Salmen, *Qualitative Analysis of Social Capital: The Case of Agricultural Extension in Mali*, in UNDERSTANDING AND MEASURING SOCIAL CAPITAL: A MULTIDISCIPLINARY TOOL FOR PRACTITIONERS 85 (Christiaan Grootaert & Thierry Van Bastelaer eds., 2002).

The history of BRI projects so far does not bode well for the ability of China's SCS to maximize the benefits and minimize the harms of BRI projects. To date China's BRI projects have more often than not been oriented towards China's own strategic, political, and economic aims, and have proven remarkably insensitive to social or environmental impacts. For example, the "ridiculous rise and collapse" of Boten,¹⁴⁸ a border town between China and Laos, stands as just one reminder of what can happen when the potential for negative impacts is ignored. Originally meant to be a Golden City-special economic zone serving as China's gateway into Southeast Asia, Boten is now a ghost town of concrete rubble.

China's leadership continues to proclaim the development benefits of the BRI by linking it directly to the United Nations Sustainable Development Goals (SDG). The challenge for researchers will be to objectively assess the impacts of BRI projects in terms of the SDGs. Such assessments will need to draw upon the most rigorously tested tools for measuring social and environmental impacts, tailored to the specific circumstances and context of each project. Tools for measuring environmental impacts are already well developed and becoming more sophisticated with the use of AI. Measuring tools developed by social capital investigators may prove useful for measuring social impacts. These include questionnaires, surveys, interviews, and mapping exercises used to collect data about social capital at an individual meso and macro level; all of which can now be entered into virtual repositories and subjected to analysis using the latest AI tools.¹⁴⁹

BRI projects pose particular challenges for those using such tools. First, there is the challenge of understanding and measuring the social effects of a BRI project over both the short and long-term. These may include the formation of new social relations in the digital realm, which then have real-world impacts. Some social relationships, including social groupings, may be made viable only after those involved are digitally connected, which in turn may be part of a BRI project. Such connections may have positive impacts on the lives of those involved, or, as is becoming increasingly obvious, digital connections can have harmful effects as well. Unlike face-to-face interactions and personal relationships, digital social relations are easily surveyed, monitored, influenced, and controlled by institutions, including business and state institutions. A related challenge arises from the risk that

148. WILL DOIG, *HIGH-SPEED EMPIRE: CHINESE EXPANSION AND THE FUTURE OF SOUTHEAST ASIA* (2018).

149. Azab & Elsherif, *supra* note 90; Shirish Jeble et al., *Influence of Big Data and Predictive Analytics and Social Capital on Performance of Humanitarian Supply Chain: Developing Framework and Future Research Directions*, 27 *BENCHMARKING: INT'L J.* 606 (2020) (Neth.); Onkar Malgonde & Anol Bhattacharjee, *Innovating Using Big Data: A Social Capital Perspective*, 2014 *AM. CONF. INFO. SYS.* 1.

private companies, public (government) bodies, and international organizations may seek to exploit both the data and the tools for analyzing the social impacts of a BRI project. If individuals and companies involved in BRI projects are subject to data collection and analysis by both Chinese and non-Chinese entities, it may ultimately come down to a question of which AI ecosystem is more sustainable in the long term.

VII. Conclusion

This paper contributes to theoretical and real-world understandings of how big data shapes corporate behavior and CSR policy, both within and beyond national borders. China's SCS stands in sharp contrast to other attempts to utilize big data to track, evaluate, and regulate corporate behavior. Private-sector attempts to track financial flows, or the social or environmental impacts of business activity — cannot compete with China's SCS. No alternative or existing system for evaluating the socially (ir)responsible behavior of business entities equals the comprehensiveness or scale of China's SCS.

To understand the implications of Chinese SCS on corporations and society at large, this paper adopting a comparative law perspective. A modified relational governance framework provides a useful theoretical tool for understanding how corporate behavior is being shaped by China's SCS. The relational governance model acknowledges the presence of politics in decision-making processes and recognizes that the boundaries between state, business, and civil society are far from clear, and in some state contexts the three may be closely entwined. This is very much the case in China, making the model eminently suited for adaptation to the Chinese context. The paper also draws attention to similarities of discourse surrounding China's SCS, and discussions of social capital as a source of value in Western scholarship. In particular, China's SCS and Western social capital protocols both attribute value to social relations that are strong and stable, and both use the language of *trustworthiness* in doing so.

Despite surface similarities, Chinese and Western understandings of CSR are unlikely to converge in meaningful ways so long as their legal, political, and discursive interpretations remain informed by distinct local forms of social relations. Yet the social vision supported by China's corporate SCS may well be sustained, even outside of China by a more effective set of compliance pressures than those imposed by Western stakeholder groups. Minimizing the risk of sanctions under China's SCS may, for example, take precedence over engaging with local communities and other stakeholder groups for corporations involved in BRI projects. These pressures give China's SCS a level of resilience that extend well beyond China's borders and may

compete with alternative visions of social worth. At the same time however, the potential internal contradictions within the SCS give rise to inherent weaknesses.

First, the political nature of the policy settings driving the SCS may be exploited by private actors seeking to “gamify” different parts of the rating system to gain an advantage. Second, conflicts of policy and political interest between different government agencies, and possibly also between different levels of the same agency, may impede or corrupt the smooth exchange of information and coordination upon which the SCS depends upon for its effectiveness. This paper argued that these weaknesses can be compared to those highlighted in Zuboff’s exploration of “Surveillance Capitalism,” with the difference being that the weaknesses of China’s surveillance socialism arise from political failures rather than market failures.

Lastly, this paper highlights how China’s BRI has the potential to extend and sustain China’s SCS beyond its borders. As the SCS continues to expand beyond China’s borders, it will come into conflict with alternative Western data ecosystems built on very different values, with very different understandings of socially responsible corporate behavior. The ultimate danger being that China’s SCS is built upon a Communist Party controlled system that shapes CSR for its own ends, and to suit its own vision of socially responsible corporate behavior.