Routledge Research in Corporate Law

THE LAW AND GOVERNANCE OF DECENTRALISED BUSINESS MODELS

BETWEEN HIERARCHIES AND MARKETS

Edited by
Roger M Barker and Iris H-Y Chiu

The Law and Governance of Decentralised Business Models

This book draws together themes in business model developments in relation to decentralised business models (DBMs), sometimes referred to as the 'sharing' economy, to systematically analyse the challenges to corporate and organisational law and governance.

DBMs include business networks, the global supply chain, public–private partnerships, the platform economy and blockchain-based enterprises. The law of organisational forms and governance has been slow in responding to changes, and reliance has been placed on innovations in contract law to support the business model developments. The authors argue that the law of organisations and governance can respond to changes in the phenomenon of decentralised business models driven by transformative technology and new socio-economic dynamics. They argue that principles underlying the law of organisations and governance, such as corporate governance, are crucial to constituting, facilitating and enabling reciprocality, mutuality, governance and redress in relation to these business models, the wealth-creation of which subscribes to neither a firm nor market system, is neither hierarchical nor totally decentralised, and incorporates socio-economic elements that are often enmeshed with incentives and relations.

Of interest to academics, policymakers and legal practitioners, this book offers proposals for new thinking in the law of organisation and governance to advance the possibilities of a new socio-economic future.

Roger M Barker is Director of Policy and Corporate Governance, Institute of Directors, UK, and Honorary Associate, Centre for Ethics and Law, University College London.

Iris H-Y Chiu is Professor of Corporate Law and Financial Regulation, Faculty of Laws, University College London.

Routledge Research in Corporate Law

Available titles in this series include:

Shareholder Primacy and Global Business
Re-clothing the EU Corporate Law
Lela Mélon

Corporate Law, Codes of Conduct and Workers' Rights
Vanisha H. Sukdeo

Insolvency Law and Multinational Groups
Theories, Solutions and Recommendations for Business Failure
Daoning Zhang

Employee Rights in Corporate Insolvency
A UK and US Perspective
Hamiisi Junior Nsubuga

Shareholder Protection Reconsidered
Derivative Action in the UK, Germany and Greece
Georgios Zouridakis

Corporate Takeover Law and Management Discipline
Francis A Okanigbuan Jnr

Shareholder Activism and the Law
The Future of US Corporate Governance
Ekrem Solak

The Law and Governance of Decentralised Business Models
Between Hierarchies and Markets
Edited by Roger M Barker and Iris H-Y Chiu

See more at www.routledge.com/Routledge-Research-in-Legal-History/bookseries/CONTEMPCJP

The Law and Governance of Decentralised Business Models

Between Hierarchies and Markets

Edited by
Roger M Barker and
Iris H-Y Chiu

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2021
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
52 Vanderbilt Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data
Names: Barker, Roger M, editor. | Chiu, Iris H.-Y., editor.
Title: The law and governance of decentralised business models : between hierarchies and markets / edited by Roger M Barker, Iris H-Y Chiu.
Other titles: Law and governance of decentralised business models
Description: Milton Park, Abingdon, Oxon ; New York, NY : Routledge, 2021. | Series: Routledge research in corporate law | Includes bibliographical references and index.
Identifiers: LCCN 2020037350 (print) | LCCN 2020037351 (ebook) | ISBN 9780367345877 (hardback) | ISBN 9780429340772 (ebook)
Subjects: LCSH: Corporate governance—Law and legislation. | Public-private sector cooperation—Law and legislation. | Decentralisation in management. | Corporation law.
Classification: LCC K1327 .L394 2021 (print) | LCC K1327 (ebook) | DDC 346/.065—dc23
LC record available at https://lccn.loc.gov/2020037350
LC ebook record available at https://lccn.loc.gov/2020037351

ISBN: 978-0-367-34587-7 (hbk)
ISBN: 978-0-429-34077-2 (ebk)

Typeset in Sabon
by Apex CoVantage, LLC

Iris dedicates this volume to co-editor Roger – thank you for your wonderful friendship and the coincidence of many shared and valuable perspectives on our favourite topics!

Roger dedicates this volume to Iris, whose legal rigour, humour and patience has underpinned the fulfilment of this project.


Taylor & Francis
Taylor & Francis Group
http://taylorandfrancis.com

Contents

Figures

Tables

Contributors

Roger M Barker is Director of Policy and Corporate Governance at the Institute of Directors. He is Honorary Associate at the Centre for Ethics and Law at University College London and a visiting lecturer at numerous academic institutions, including Saïd Business School, Cass Business School, Tokyo University and Seoul National University. Dr Barker is the holder of a doctorate from Oxford University and the author of numerous books and articles on corporate governance and board effectiveness, including: *Corporate Governance and Investment Management: The Promises and Limitations of the New Financial Economy* (with Iris H-Y Chiu, 2017), *The Effective Board: Building Individual and Board Success* (2010) and *Corporate Governance, Competition, and Political Parties: Explaining Corporate Governance Change in Europe* (2010). A former investment banker, Dr Barker spent almost 15 years in a variety of equity research and senior management roles at UBS and Bank Vontobel in the UK and in Switzerland.

Nina Boeger is Reader in Law at the University of Bristol Law School and director of the Law School's Centre for Law and Enterprise, which she founded in 2015. She is a qualified solicitor and German lawyer. Before joining academia, Nina worked in commercial legal practice. Her expertise lies in the field of corporate law and governance (with a focus on UK, US and European systems), particularly the development of sustainable forms of company ownership, including social and cooperative enterprises and steward-owned firms. Nina's work considers how we might develop the role of company law and, more generally, the law of business organisations, in supporting and nurturing the evolution of sustainable economies. She has previously worked on issues of regulatory governance and the development of European regulatory networks, especially the regulation of public services and utilities. For her work she has received a series of external research grants and awards, including from the AHRC, ESRC and the EU Commission, and she has held a number of advisory positions and fellowships.

Roger Brownsword holds professorial positions in Law at King's College London (where he is Director of TELOS) and at Bournemouth University.

He is an honorary Professor in Law at the University of Sheffield, and he is currently a visiting professor at City University Hong Kong. His many publications include *Contract Law: Themes for the Twenty-First Century* (2006), *Rights, Regulation and the Technological Revolution* (2008), *Law, Technology and Society: Re-imagining the Regulatory Environment* (Routledge, 2019) and, most recently, *Law 3.0: Rules, Regulation and Technology* (Routledge, 2020). He is the founding general editor (with Han Somsen) of *Law, Innovation and Technology* as well as being on the editorial board of international journals, including the *Modern Law Review*. In addition to serving as a specialist adviser to parliamentary committees, he has been a member of various working parties, most recently the Royal Society Working Party on Machine Learning.

Iris H-Y Chiu is Professor of Corporate Law and Financial Regulation at University College London. She is Director of the UCL Centre of Ethics and Law and advances the public and stakeholder engagement of the Centre's agenda in relation to a wide range of issues in relation to law, regulation, governance and ethics in business and finance. She has published extensively in the areas of corporate governance and financial regulation, including *The Foundations and Anatomy of Shareholder Activism* (2010), *Corporate Governance and Investment Management: The Promises and Limitations of the New Financial Economy* (with Roger M Barker, 2017); *Regulating (From) The Inside: The Legal Framework for Internal Control in Banks and Financial Institutions* (2015) and *Banking Law and Regulation* (with Joanna Wilson, 2019). She has interests in financial regulation and governance, law and technology, corporate law and governance and the law and policy for business and finance generally. She is a Research Fellow of the European Corporate Governance Institute, and most recently a Senior Scholar at the European Central Bank's Legal Research Programme.

Andreas Rühmkorf is a Senior Lecturer in Commercial Law at the University of Sheffield. Andreas has a PhD from the same institution, and he is also admitted to the bar in Germany (*Rechtsanwalt*). His research focuses on the legal regulation of CSR and sustainability in global supply chains as well as on company law and corporate governance. Andreas is the author of *Corporate Social Responsibility, Private Law and Global Supply Chains* (2015) as well as of several chapters and articles about global supply chains.

Alexandra Schneiders is a Research Associate at the University College London Energy Institute. Her research focuses on the policy and regulatory aspects of peer-to-peer energy trading using distributed ledger technologies (DLTs). More broadly, she is interested in the interaction between industry, government and consumers within peer-to-peer (P2P) platforms. Alexandra has degrees in law and politics. Before joining UCL she worked

as a policy and legal consultant for energy sector clients and the European Commission in Brussels. As of September 2019, Alexandra is the Operating Agent of the Global Observatory on Peer-to-Peer, Community Self-Consumption and Transactive Energy Models (GO-P2P), an Annex of the User-Centred Energy Systems Technology Collaboration Programme (Users TCP) by the International Energy Agency (IEA). The Observatory will study pilots of these new business models across the world for three years. Its main aim is to produce outputs that will promote evidence-based policymaking on these models nationally and internationally.


Taylor & Francis
Taylor & Francis Group
http://taylorandfrancis.com

1 Introduction

Roger M Barker and Iris H-Y Chiu

This volume showcases a range of increasingly ubiquitous business models that can be regarded as falling in between the notions of 'markets' and 'hierarchies'.[1] To date, the legal conceptualisation of business models that can be characterised as 'between markets and hierarchies' is limited, as such business models are fraught with 'categorisation' problems. Cafaggi opines that these are 'located at the intersection between exchange and organisational contracts, thus, in the conventional view, between contract and company law'.[2] This is despite the fact that some of these business models such as business networks date back to historical periods.[3]

In this introductory chapter, we provide an overview of a range of business models 'between markets and hierarchies' that are discussed in this book. We collectively call them 'decentralised business models', which is an imperfect collective term, but which highlights a common legal consequence. Decentralised business models discussed in this volume include business networks, the multinational global supply chain, the platform economy and its more decentralised sister version, the blockchain-based platform and public–private partnerships. The use of the term 'decentralised' business model characterises the business model as not falling within the scope of a legally recognised organisational form such as the corporation. This results in the decentralised business model being considered to be legally 'closer' to the conceptualisation of the market. This conceptualisation focuses on the micro and often bilateral relationships between various parties in the decentralised business model, but such a picture is incomplete, as decentralised business models do feature multilateral and governance aspects. The legal institutions that support the economic concept of the market, i.e. contract

1 Theorised extensively in Oliver Williamson, 'Markets and Hierarchies: Some Elementary Considerations' (1973) 63 *The American Economic Review* 316.

2 Fabrizio Cafaggi, 'Contractual Networks and the Small Business Act: Towards European Principles?' (2008) 4 *European Review of Contract Law* 493 at 507.

3 Simon Deakin, 'The Return of the Guild?' in Marc Amstutz and Gunther Teubner (eds), *Networks: Legal Issues of Multilateral Co-operation* (Oxford: Hart Publishing 2009), ch3.

law, have by default been treated as more relevant to such business forms[4] but often do not extend to multilateral and governance aspects of such arrangements. This binary treatment in law has reinforced the under-theorisation and lack of institutional development in the law with regard to decentralised business models. Although European legislation has introduced a legal innovation in the form of the European Economic Interest Grouping (EEIG)[5] to cater for decentralised European business arrangements, this legal innovation caters for certain rather specific business-to-business arrangements within the geographical boundaries of Europe and does not capture the wider international dimension.[6] Further, the EEIG is generally viewed as unable to cater for newer organisational developments in more commercially oriented decentralised business models such as peer-to-peer economic arrangements.

It is time to consider a form of re-theorisation and new institutional developments in the law so as to cater for the needs of economic and social transformations that give rise to these organisational innovations.[7] In particular, this chapter argues that wisdom can be drawn from governance norms which already exist for legally recognised organisational forms in order to meet some of the needs of decentralised business models, i.e. from features of the mainstream corporate governance paradigm. We do not claim that the law of organisations and governance developed for hierarchies such as the corporate form is necessarily the only paradigm for the decentralised business model.[8] What we argue is that it is misleading to conceive of the law of organisations and governance for decentralised business models as irrelevant. Existing governance principles contain insights and solutions that are relevant for the future effectiveness and legitimacy of the decentralised business structure.

This chapter provides new theoretical anchoring for the development of organisational and governance norms (in hard or soft law) applicable to the decentralised business model. This is important in order to provide a basis for developing governance for such business models as a normative

4 Generally, Amstutz and Teubner (2009).

5 Council Regulation EEC No 2137/85 of 25th July 1985 on the European Economic Interest Grouping (EEIG) and transposed in the UK European Economic Interest Grouping Regulations 1989. Upon the UK's withdrawal from the EU, the existing EEIGs registered in the UK are grandfathered and can be converted into a UK Economic Interest Grouping. However the provision for only UKEICs after Brexit limits the usefulness of such a legal form, as inter-firm networks can be global in nature and not just European. See The European Economic Interest Grouping (Amendment) (EU Exit) Regulations 2018.

6 See Chapter 2.

7 Mark Thomas Kennedy, Jade (Yu-Chieh) Lo and Michael Lounsbury, 'Category Currency: The Changing Value of Conformity As a Function of Ongoing Meaning Construction' in Greta Hsu, Giacomo Negro and Özgecan Koçak (eds), *Categories in Markets: Origins and Evolution* (Bingley: Emerald Insight 2010) at 369–397.

8 Amstutz and Teubner (2009).

and not merely as a contractual order. We do not advance an agenda supporting a complete reversion to 'centralised' governance frameworks for decentralised business models as such but instead argue that the recognition of 'organisational' aspects of these business arrangements and their needs for governance provide a basis for developing thinking about the design of governance frameworks and tenets, which is ultimately likely to consist of a mixture of hierarchical and heterarchical aspects.[9]

Law, markets and hierarchies

Markets and hierarchies are often conceived as representing a binary choice for economic activity organisation. This dates back to the Coasean question of why there is a need to establish a firm in the first place, instead of carrying out all economic transactions directly on a relevant market.[10] The market is regarded as a place for exchange by rational actors acting instrumentally to maximise their own utility and is therefore the starting point for organising economic activity efficiently.[11] Coase was of the view that market-based economic activity was not always the most efficient, as transactions such as repeat ones may be more optimally taken off-market and internalised within the structure of a 'firm'. The firm becomes an 'internal marketplace' that coordinates certain transactions more optimally, as the 'transaction costs'[12] in relation to discrete economic activities can be reduced. This view of the firm has also led to an 'aggregate' or contractarian view of the firm[13] as merely an umbrella structure whose reality is comprised of the internalised mediation of a variety of contractual arrangements, which eventually results in a hierarchical arrangement. The Coasean choice paradigm for organising economic activity has been further expounded by Williamson, whose work details under what circumstances (such as bounded rationality and market failures) transactions should best be organised within the 'hierarchy', although the hierarchy can give rise to subordination and subjugation.[14] Hence the firm is a conceptual derivative of the market and not a polar

9 For example, see Will Sutherland and Mohammad Hossein Jarrahi, 'The Sharing Economy and Digital Platforms: A Review and Research Agenda' (2018) 43 *International Journal of Information Management* 328 in relation to many combinations of hierarchical and heterarchical features in the platform economy; see more in Chapter 7.

10 Ronald Coase, 'The Nature of the Firm' (1937) 4(16) *Economica* 386–405.

11 James G Carrier, 'Introduction' in James G Carrier (ed), *The Meanings of the Market* (Oxford: Berg Publications 1997). The Introduction presents this depiction as an economic perspective which is caricatured and ignores the relational dimensions in the workings of markets.

12 Williamson (1973) and Oliver Williamson, 'Corporate Governance' (1984) 93 *Yale Law Journal* 1197.

13 Frank H Easterbrook and Daniel R Fischel, 'The Corporate Contract' in *The Economic Structure of Corporate Law* (Cambridge, MA: Harvard University Press 1991), 1ff.

14 Williamson (1973).

opposite, and whether economic activity is organised as 'firm' or 'on market' depends on transaction costs.[15]

The conceptual binary of markets and hierarchies is reflected in legal institutions, although this is not to suggest that legal institutions have necessarily followed economic conceptions. The law of contract applies to each discrete transaction that is an exchange and not a gift,[16] and foundational precepts in contract law assume the volition of a (rational) economic actor entering into an arms-length transaction that the individual has considered for himself/herself.[17] These legal concepts have theoretical resemblance and affinity with the free market economy, where the individual has the freedom and exercises his/her own will to transact based on market signals such as supply, demand and price.[18] Although the 'freedom of contract' that matches the 'free market' is an over-simplification, and developments in law and regulation have struck new balances of rights and remedies in contractual transactions, depending on market context,[19] what can be broadly agreed on is that the key legal institution that underlies markets is the law of contract. Relations conducted on a market are governed by its framework and norms. However, for a hierarchy, the most popular legal form of which is the corporate form, corporate law governs the establishment and relations conducted in and with the corporate form.

Nevertheless, it is arguable that 'corporate law' is distinct from the law for markets. Corporate law evolved from partnership law in England, which provided the early basis for a hybrid contractual and organisational law.[20] A partnership is an association of persons for the purposes of carrying out business with a common view to profit,[21] and partnership law strikes a balance between facilitating partners' arrangements between themselves[22] and providing mandatory rules to govern partners' relations with third parties and *inter se*.[23] The absolute freedom of contract for a partnership is not countenanced in the UK, nor in the US.[24] The continuing relational

15 Above.

16 As a valid contract requires consideration or 'quid pro quo'.

17 The concepts of 'offer' and 'acceptance' typify that depiction; see Jonathan Morgan, *Great Debates in Contract Law* (London: Palgrave Macmillan 2015), ch1.

18 Samuel Cregg, 'Natural Law, Scholasticism and Free Markets' in Stephen Copp (ed), *The Legal Foundations of Free Markets* (London: Institute of Economic Affairs 2008), ch3.

19 PS Atiyah, *The Rise and Fall of the Freedom of Contract* (Oxford: Clarendon 1985); FH Buckley (ed), *The Rise and Fall of the Freedom of Contract* (Durham and London: Duke University Press 1999) at Parts I and VI.

20 Partnerships Act 1890, especially provisions such as s4 on the 'firm' as a quasi-collective entity and s20 on the priority of 'partnership property'.

21 S1, Partnerships Act 1890.

22 E.g. s24.

23 E.g. s5–12, 25–30.

24 Leo Strine Jnr and Leo Travis Laster, 'The Siren Song of Unlimited Contractual Freedom' in Robert W Hillman and Mark J Loewenstein (eds), *Research Handbook on Partnerships, LLCs and Alternative Forms of Business Organizations* (Cheltenham: Edward Elgar 2015), ch1.

dimension of the partnership seems to justify the imposition of norms in relation to reasonably expected behaviour in relation to trust reposed by third parties and between partners *inter se*. This relational dimension also accounts for why corporate law is not as fully 'contractarian' as some commentators argue. A school of thought in corporate law views corporate law as 'contractarian' in nature, reflecting the hypothetical bargains that parties would optimally have made.[25] Corporate law does have facilitative aspects, where choices are presented to incorporators to structure their powers and relations, but it also includes many mandatory aspects which provide for norms of conduct and accountability that are not merely standardised hypothetical contracts.[26]

Incorporation and the privilege of limited liability are granted by the state, hence there is a public interest dimension in how the corporate form should be governed.[27] Further, both theoretical and empirical accounts of corporate law development challenge the view that corporate law is merely contractarian. For example, Moore's account of corporate law as governing the exercise of administrative power on the part of managers brings in a public law characterisation of corporate law in relation to its core concepts of governance.[28] Further, the existence of mandatory provisions that divide power in corporate decision making between the Board and general meeting[29] (that cannot be 'contracted' out of) and the increasing advent of corporate governance standards as quasi-hard law[30] (imposed usually by securities exchanges) reflects a state of corporate law as a body of norms

25 William A Klein, 'The Modern Business Organization: Bargaining Under Constraints' (1982) 91 *Yale Law Journal* 1521; David Charny, 'Hypothetical Bargains: The Normative Structure of Contract Interpretation' (1991) 89 *Michigan Law Review* 1815; Easterbrook and Fischel (1991).

26 Above. But see Lucian Ayre Bebchuk, 'The Debate on Contractual Freedom In Corporate Law' (1989) 89 *Columbia Law Review* 1395; 'Limiting Contractual Freedom in Corporate Law: The Desirable Constraints on Charter Amendments' (1989) 102 *Harvard Law Review* 1820; Victor Brudney, 'Corporate Governance, Agency Costs, and the Rhetoric of Contract' (1985) 85 *Columbia Law Review* 1403; Melvin von Eisenberg, 'The Structure of Corporation Law' (1989) 89 *Columbia Law Review* 1461; Thomas Lee Hazen, 'The Corporate Persona, Contract (and Market) Failure, and Moral Values' (1991) 69 *North Carolina Law Review* 273.

27 This is the concession theory of the firm that justifies imposing mandatory law on corporations for having the privilege to incorporate as a separate legal person and enjoy limited liability.

28 Marc Moore, *Corporate Governance in the Shadow of the State* (Oxford: Hart 2013).

29 The division of powers such as in Arts 3 and 4 of the Model Articles for Private and Public Companies, powers reserved for the general meeting such as s168, 239 and s188–214, Companies Act 2006.

30 The UK Corporate Governance Code 2018; see www.frc.org.uk/directors/corporate-governance-and-stewardship/uk-corporate-governance-code. The norms of the Code can be treated as quasi-legalised; see Marc T Moore, '"Whispering Sweet Nothings": The Limitations of Informal Conformance in UK Corporate Governance' (2015) 9 *Journal of Corporate Law Studies* 95.

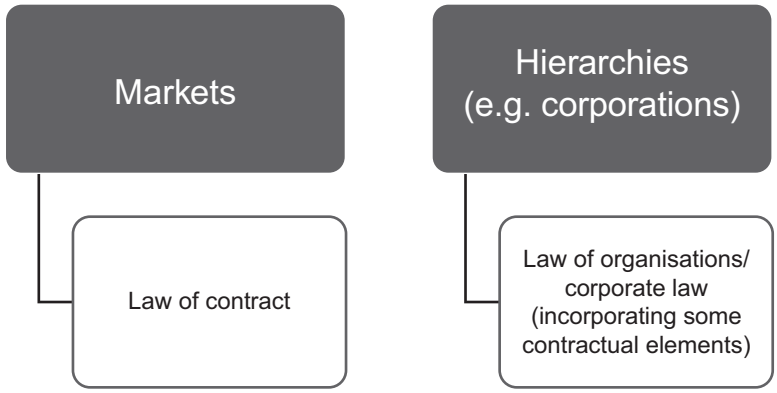

Figure 1.1 Mapping of bodies of law onto the market/hierarchy binary

that govern the use of the corporate form and its internal governance, and not merely as a rack of convenient options for businessmen who choose the corporate form to conduct their economic activities.

In sum, we characterise corporate law as attaining an 'organisational' character, providing governance norms for the discrete organisational form of the corporation, whether of a facilitative or mandatory nature. Indeed, corporate law has also increasingly made distinctions within its body of norms pertaining to publicly traded companies (also governed by securities regulation) and private companies.[31] The 'large private company', which features relational characteristics closer to the publicly traded company, is also coming under distinct treatment.[32]

The law mapping onto the binary choice between markets and hierarchies looks as shown in Figure 1.1.

This legal mapping suggests that law reinforces the broad binary choice, although the two bodies of law have related conceptual foundations. We discuss below that the law's binary treatment has not kept up with developments in business organisation and that new 'technologies' in business organisation are not yet reflected, so the law is forced to adapt from its

31 E.g. the written resolutions regime for private companies that provide convenience for members to agree on matters without the need to call a general meeting in the traditional way, e.g. s288–300, Companies Act 2006.

32 Large private companies can be subject to more obligations resembling those imposed on publicly traded companies, such as corporate disclosures: of directorial discharge of responsibility, s414CZA, of corporate governance arrangements, Part 8, Schedule 7, Companies Act 2006 amended by the Companies (Miscellaneous Reporting) Regulations 2018, of stakeholder and non-financial performance, s414CA, and under the Modern Slavery Act 2015, s54.

existing premises. The consequence is that organisational law that is tied to recognised organisational forms such as the company, partnership or limited liability partnership applies discretely within those contexts, and organisational arrangements falling outside of the scope of legally recognised organisational forms are governed by the default law that governs markets, i.e. contract law. These arrangements are discussed below.

Decentralised business models as neither hierarchies nor markets

The universe of decentralised business models we look at in this volume is increasingly diverse and may be defined through a variety of legal arrangements. For example, decentralised networks of associated companies can be established through webs of equity stakes and cross-ownership linkages. Business networks may also be created by interfirm alliances of autonomous business or not-for-profit enterprises without any ownership linkages but who nonetheless work together to pursue a shared business or social purpose, e.g. in relation to R&D, marketing, lobbying or healthcare provision. We look in more detail at this relatively innovative form of business decentralisation in Chapter 9.

A particular focus of this book is the contractual mechanisms used to build global supply chains and outsourcing arrangements across the multinational business model. We also evaluate efforts to adopt a similar approach in the public sector, driven by the imperative of moving away from historical 'command-and-control' structures through organisational innovations such as public–private partnerships, Subsequently, we look at newer developments in networks in terms which directly connect consumers – often framed as peer-to-peer, such as in the platform-based sharing economy and more recently, technologically driven transformations in business such as the distributed ledger-based model of disintermediated business.

The above business models can all be regarded as 'decentralised', as their characteristics in terms of boundary-definition (legal personalities), hierarchicalisation (in terms of rights and powers of decision making) and legalisation of relationships to facilitate enforcement (duties, rights and remedies, with third parties or *inter se*) are not always determinate. The indeterminacy is as a result of such arrangements not falling within the scope of organisations law such as corporate law. What we increasingly observe is that the corporate form and its legal framework are not a good fit for the purposes or efficiencies of many emerging business arrangements, and these arrangements revert or migrate to being framed and understood within the realm of contract rather than company law.[33] We now turn to each of these specific arrangements in more detail.

33 F Cafaggi (ed), *Contractual Networks, Interfirm Cooperation and Economic Growth* (Cheltenham: Edward Elgar 2011) at Introduction, chs 4, 5 and 7.

A first way in which a centralised hierarchical entity might seek to decentralise its activities is by creating a network of subsidiary, special-purpose or joint-venture (JV) entities in which the apex corporate entity takes equity stakes, either alone or with business partners. This may allow it to share risk or mobilise external investment or know-how for specific activities and to operate more flexibly or legitimately in specific markets with local partners and/or local regulators. The creation of various localised legal entities with separate legal personality from that of the holding entity may also provide a shield against the transmission of unforeseen shocks and potential liability across and up the group – an issue that we explore with respect to DBMs' liability for human rights practices in Chapter 5.

Such a structure based on ownership linkages between legal entities can maintain many of the authority characteristics of a traditional hierarchical entity – with many of its relational features based on obligations defined in company law (e.g. the shareholder voting rights controlled by the holding company). This may make it an attractive option from the holding company perspective. However, the involvement of third-party equity investors in the structure, e.g. in the form of minority or JV partner equity stakes, may result in demands for a renegotiation of the governance and decision-making structure – often in the form of bespoke shareholders or JV contractual agreements. The result is a hybrid arrangement mixing elements of company and contract law which are both necessary in order for such business arrangements to be acceptable to the various equity participants.

Business networks or interfirm alliances are usually arrangements of joint investment, cooperation, learning and mutual benefit entered into between corporate entities in order to exploit combined capacities and economies of scale and to develop expensive but potentially socially beneficial innovation.[34] In these arrangements, discrete organisational entities such as different corporations or, for example, corporations and universities could enter into agreements to develop research and learning capacity with a view to product development in the future, often in the face of uncertainty in terms of prospects and cost.[35] There are many business, industry and institutional factors in different jurisdictions driving the formation of networks, such as the need to enhance specialisation and efficiency as well as economic and resource interdependence. There are also relational paradigms driving such networks such as institutional factors and ties in kinship or common financial ownership.[36] These networks are usually formalised alliances with

34 Walter W Powell, 'Learning from Collaboration: Knowledge and Networks in the Biotechnology and Pharmaceutical Industries' in Nicole Woolsey Biggart (ed), *Readings in Economic Sociology* (London: Blackwell 2002), ch14.

35 Above.

36 Sebastian Zander, Simon Trang and Lutz M Kolbe, 'Drivers of Network Governance: A Multitheoretic Perspective with Insights from Case Studies in the German Wood Industry' (2016) 110 *Journal of Cleaner Production* 109.

a view to the medium or long term. However these alliances are not necessarily or ultimately 'corporatised' as would occur if the various entities were to proceed to a fully fledged corporate merger or acquisition.[37]

Although they may be founded on a relatively informal basis, business networks become increasingly governed by contract as the intensity of cooperation between the various entities grows. However, as these arrangements are highly relational,[38] meaning that there are multiple parties who commit to each other in goodwill and over a long term, contractual governance often does not reflect all the needs of such arrangements. Multiple parties in a business network may not all be parties to one contractual arrangement, and there may be a collection of contractual arrangements among different parties in the same arrangement in relation to their specific roles.[39]

Contractual analysis is very much based on a bilateral assumption and does not cater very well for a 'collection' of multilateral arrangements.[40] The enforceability of contracts for external parties to contracts has been facilitated under the Contract (Rights of Third Parties) Act 1998 in the UK,[41] but even the Act does not provide for the notion of a collection of contracts in a network as all related to each other. Contractual analysis in many jurisdictions faces challenges in relation to each contract's discreteness. Further, contractual analysis is highly *ex ante* in nature and does not provide for the recognition of networks' needs in *ex post* negotiations and the formation of afterward expectations or norms.[42] Shared understandings and expectations can arise in an *ex post* manner in the network,[43] and it is queried if the legal framework governing network relations can reflect and advance this 'sociological' reality. Further, it may be argued that although contract law by default governs network relations, contractual enforcement is not practicable, as litigation is too damaging and disruptive to such long-term relations.[44] This lacuna in practical enforcement can give rise to difficulties

37 Zhiang (John) Lin, Mike W Peng, Haibin Yang and Sunny Li Sun, 'How Do Networks and Learning Drive M&As? An Institutional Comparison between China and the United States' (2009) 30 *Strategic Management Journal* 1113.

38 Gunther Teubner, 'Coincidentia Oppositorum: Hybrid Networks Beyond Contract and Organisation' in Amstutz and Teubner (2009), ch1; Cordula Heldt, 'Internal Relations and Semi-spontaneous Order: The Case of Franchising and Construction Contracts' in above, ch8.

39 Such as multilateral or linked contracts, see F Cafaggi (ed), *Contractual Networks, Interfirm Cooperation and Economic Growth* (Cheltenham: Edward Elgar 2011), ch4.

40 Teubner (2009).

41 Roger Brownsword, 'Network Contracts Revisited' in Amstutz and Teubner (2009) at ch2; Marc Amstutz, 'The Constitution of Contractual Networks' in above, ch16.

42 F Cafaggi (ed), *Contractual Networks, Interfirm Cooperation and Economic Growth* (Cheltenham: Edward Elgar 2011) at Introduction, ch7.

43 Heldt (2009); Peter W Heermann, 'The Status of Multilateral Synallagmas in the Law of Connected Contracts' in Amstutz and Teubner (2009), ch6.

44 Gillian Hadfield and Iva Bozovic, 'Scaffolding: Using Formal Contracts to Support Informal Relations in Support of Innovation' (2016) *Wisconsin Law Review* 981.

if disputes arise.[45] We argue below that an 'organisational' perspective in law for business networks may be useful for catering to needs that are not clearly met by contractual governance alone.

The 'vertically' integrated firm is a phenomenon that has been written about since the 1970s.[46] This phenomenon challenges the atomistic Coasean firm as a self-sufficient 'internal market' coordinating all of its component economic activities. Firms that produce widgets may specialise in the manufacturing aspect and would have to tie up with suppliers for raw materials and components and with downstream distributors and a marketing network for sales. This picture of the vertically integrated firm represents a truer depiction of economic activity than the Coasean one. Further, the development of long-termist supply and distribution relationships makes such relationships not 'market-based' in nature, as they develop relational characteristics and individual entities are not always autonomous units dealing at arm's length with each other.[47]

With the advent of globalisation and free trade since the 1980s, the vertically integrated firm has become a more complex and larger cluster, spanning the world. In particular, the global supply chain is a network of many discrete corporate forms – small and large – across the globe. For example, a large corporation may have a global supply chain of substantial networks of firms across jurisdictions, numbering in hundreds or even thousands, as outsourcing, subcontracting and sub-subcontracting layers are constructed.[48] The supply chain can be a tightly woven network, as some suppliers are key and maintain long-term contractual relationships. However, contractual governance applies throughout the supply chain between the discrete corporate entities, and there is no 'collective' framing of relations *inter se*. The operation of corporate law doctrines such as separate legal personality and contractual privity insulate each firm's responsibility and liability, including the multinational corporations' responsibilities and liabilities

45 It has been queried if the involvement of criminal law in Nissan's ousting of Carlos Ghosn, could in part be attributed to his bringing to bear pressures regarding a formal merger between Renault and Nissan, a prospect that Nissan resisted but lacked formal channels within the network to address. See Robert Ferris, 'Nissan Executives Allegedly Orchestrated Carlos Ghosn's Arrest to Kill Merger with Renault' (CNBC, 28 March 2019) at www.cnbc.com/2019/03/28/nissan-executives-allegedly-sought-ghosns-arrest-to-kill-renault-merger.html.

46 GB Richardson, 'The Organisation of Industry' (1972) 82 (327) *Economic Journal* 883–896.

47 Filipe J Sousa, 'Markets-as-networks Theory: A Review' in Arch G Woodside (ed), *Organizational Culture, Business-to-Business Relationships, and Interfirm Networks* (Bingley: Emerald 2015), ch8.

48 Douglas M Lambert and Martha C Cooper, 'Issues in Supply Chain Management' (2000) 29 *Industrial Marketing Management* 65.

too,[49] although there may in reality be high levels of interdependencies. For example, Uniqlo was not directly liable to compensate a subcontractor factory's unpaid seamstresses in Indonesia when the factory collapsed.[50] However, the avoidance of any responsibility for this episode has been criticised from the perspective of business ethics.[51] A similar story unfolded in relation to unpaid factory workers in Turkey who were working on clothes to be supplied to Zara, owned by the Inditex group, one of the largest and most profitable retail giants in the world.[52] The strict application of contractual governance, which focuses on bilateral relations and responsibilities, is increasingly seen as inadequate in dealing with the realities of the global supply chain.[53] Further, new regulatory law in the EU and UK impose an unsatisfactory and indeterminate form of responsibility on publicly traded corporations.[54] We argue below that an 'organisational' perspective can offer new wisdom in looking at the global supply chain and legal doctrines for responsibility and liability.

In relation to public–private partnerships, it may be queried why this category is included in this volume. Although public goods and services are usually involved, the arrangements are often underpinned by economic calculus

49 The UK has no doctrine of enterprise liability, see *Adams v Cape Industries plc* [1990] Ch 433; *Prest v Petrodel Resources Ltd* [2013] UKSC 34. But there is increasing concern as to whether certain parent companies may, by virtue of control or involvement in setting policy for subsidiaries, owe a duty of care to subsidiary employees directly; see *Chandler v Cape plc* [2012] EWCA Civ 525. This seemed to be applied narrowly in *Okpabi and others v Royal Dutch Shell Plc and another* [2018] EWCA Civ 191, where the court did not regard the CSR policies of the parent company as necessarily inferring that the parent company had the requisite level of control or involvement in subsidiaries or affiliates to be owing a duty of care directly to subsidiary or affiliate employees or stakeholders. But the Supreme Court decision of *Vedanta Resources plc & another v Lungowe & others* [2019] UKSC 20 opined that where such policies are accompanied by a parent company's involvement in implementation in a subsidiary, the parent company could owe a direct duty of care to the subsidiary's claimants. The opinion is not the ratio of the case, as the case involved whether there was a triable issue in relation to the existence of the duty of care.

50 Cleanclothes.org, 'Statement on the Refusal of Uniqlo to Pay What is Owed' (22 February 2018) at https://cleanclothes.org/news/2018/02/22/statement-on-the-refusal-of-uniqlo-to-pay-what-is-owed.

51 Above.

52 Cleanclothes.org, 'Zara, Next, Mango Slammed for Leaving Workers Without Wages in Turkish Factory' (25 September 2019) at https://cleanclothes.org/news/2017/09/25/zara-next-mango-slammed-for-leaving-workers-without-wages-in-turkish-factory. It appears that Zara has since set up a voluntary 'hardship fund' for workers.

53 Jennifer Bair, 'The Corporation and the Global Value Chain' in Grietje Baars (ed), *The Corporation* (Cambridge: CUP 2017), ch20.

54 Due diligence procedures for global supply chains are to be disclosed under s414CA, Companies Act 2006; also s54 Modern Slavery Act. Further, disclosure and certification are required for mineral importation that may be tainted by conflict in the Democratic Republic of Congo, see EU Conflict Minerals Regulation, in force in 2021. See Iris H-Y Chiu, 'An Institutional Theory of Corporate Regulation' (2019) 71 *Current Legal Problems* 279 and citations within.

and efficiency considerations,[55] and these are entered into as contractual arrangements governed by private and not public law. The public–private partnership is an arrangement that defaults to contractual governance, as the state is regarded as entering into a transaction with a private entity. This is in spite of the fact that the private entity is to step into the state's position in relation to the provision of public goods and services.[56] In a contractual governance framework, there is likely an inadequate reflection of the public interest in the ultimate delivery of the outsourced good or service. The provision of public goods and services will inevitably have been framed by private contractors in terms of how they can be instrumentalised in pursuit of private corporate objectives,[57] and various models of public–private risk allocation may be financially motivated and inadequately designed to address the incompatibility between private-sector incentives and the delivery of public goods or services.[58] The failure of private provision of probation services in the UK,[59] for example, raises timely challenges to a purely contractual governance model for the public–private partnership. Also, the self-interested behaviour of executives, boards and shareholders of private companies engaged in delivering outsourcing contracts for the public sector has been particularly criticised in the wake of the failure of key government contractor Carillion plc in early 2018.[60] We therefore explore in Chapter 6 if an organisational perspective of these arrangements may help us to conceive of a new dimension of organisational objectives and norms in order to address the deficits left unaddressed by contractual governance in the public service outsourcing sector.

Next, we turn to newer business forms that have arisen in the 'decentralised' space, but are different in character from the 'business-to business' or 'business-state' forms discussed above. Increasingly, decentralised business forms bring together consumers or retail level participants to join in

55 E.g. Martijn van den Hurk, 'Public Private Partnerships: Where Do We Go From Here? A Belgian Perspective' (2018) 23 *Public Works Management and Policy* 274.

56 Andreas Abegg, 'Regulation of Hybrid Networks at the Intersection between Governmental Administration and Economic Self-Organisation' in Amstutz and Teubner (2009), ch14; Terence Daintiff, 'Mixed Public-Private Networks as Vehicles for Regulatory Policy: Comments on the Chapter by Andreas Abegg' in above at Chapter 15.

57 Erik-Hans Klijn and Geert R Teisman, 'Governing Public Private Partnerships' in Stephen Osborne (ed), *Public-Private Partnerships: Theory and Practice in International Perspective* (Oxford: Routledge 2007), ch5; A Ng and Martin Loosemore, 'Risk Allocation in the Private Provision of Public Infrastructure' (2007) 24 *International Journal of Project Management* 66.

58 Roger Wettenhall, 'The Rhetoric and Reality of Public-Private Partnerships' (2003) 3 *Public Organisation Review* 77.

59 'Private Probation Contracts Ended Early by Government' (BBC News, 27 July 2018) at www.bbc.co.uk/news/uk-44973258.

60 'Carillion Collapse Exposed Government Outsourcing Flaws – Report' (The Guardian, 9 July 2018) at www.theguardian.com/business/2018/jul/09/carillion-collapse-exposed-government-outsourcing-flaws-report.

economic activity in multiple capacities, to consume as well as to produce. These business models rely on the network effects of mass decentralised participation and turn retail level participants into 'peers' for the purposes of commercial activity.

First, we look at platform business models, or what is commonly referred to as the 'sharing economy'. Platform business models introduce the commercialisation of what may hitherto not be commercialised or commodified due to barriers to entry, such as the need for commercial premises, stock, investment, access to markets or regulatory approval, and allow what Sundarajan[61] calls 'underutilised assets' or what Benkler[62] refers to as 'excess capacity' to be made marketable via new means of access and connection. Such underutilised assets or excess capacity are often found in the hitherto uncommercialised spheres of retail level asset ownership or productive capacity.

Morgan[63] defines two main developments in the platform economy. One is to support new ways of accessing and demanding commercial goods or services, such as peer-to-peer lending for small business or personal lending outside of the banking sector, or the oft-cited Uber or AirBnB model that deploys people's spare capacities to be commodified into chauffeuring or temporary lodging services. Second, the platform economy can be non-commercial in nature, chiefly concerned with bringing together people in communities or globally to participate in non-monetary exchange, co-creation of a bigger project, etc., supporting new ways of co-creating socio-economic goods. One example is the online neighbourhood platform that helps dog owners look for temporary sitters,[64] and others would be the global network of participants that creates open source software and Wikipedia.[65]

Platform-based business models bear many characteristics of marketplaces, as they are often open to mass participation. However, it is arguable that they are not merely marketplaces but are communities, as participants conform to certain eligibility and transaction standards.[66] The platform-based business models are often themselves incorporated as corporate forms and deal with participants on the basis of contractual governance. They often carry out extensive self-governance and contractual governance with

61 Arun Sundarajan, 'The Economic Impact of Crowd-sourced Capitalism' in *The Sharing Economy* (Cambridge, MA: MIT Press 2016), ch5.

62 Yochai Benkler, 'Peer Production and Sharing' in *The Wealth of Networks* (New Haven, CT: Yale University Press 2006), ch3.

63 Bronwen Morgan, 'The Sharing Economy' (2018) 14 *Annual Review of Law and Social Science* 351.

64 Devyani Prabhat, '"BorrowMyDoggy.Com": Rethinking Peer-to-peer Exchange for Genuine Sharing' (2018) 45 *Journal of Law and Society* 84.

65 Yochai Benkler, 'The Economics of Social Production' in Benkler (2006), ch4.

66 See Chapter 7.

users, such as in the cases of eBay,[67] AirBnB[68] and Uber[69] in order to maintain the social capital of reputation and the economic capital of network effects.

However, as rightly pointed out in the volume edited by McKee, Makela and Scassa,[70] governance arrangements relating to platforms leave a number of issues unanswered. Contractual governance often obscures the inequalities of bargaining power between platform operators such as Uber or AirBnB and participants.[71] For example, Uber drivers in India regard their work as a full-time job and not casual labour and commit to personal risks such as car finance. They have been severely affected by company policies that reduce fares in the face of competition, such policies being contractually permitted, although they give rise to issues of stakeholder justice.[72] Further, contractual governance leaves certain issues in grey areas of legality, as these equivalent matters would have been framed more clearly as amounting to regulatory obligations in a corporate context. One example is whether platform participants need to be treated like their licensed counterparts, such as hotels in the hospitality industry or licensed taxis,[73] and another is whether participants in the sharing economy are 'workers' benefiting from employment law.[74]

The moves made by Uber and Lyft to give shares in the platform operator's company to the most committed drivers at the companies' initial public offers[75] reflects an interesting dilemma for the companies themselves, as they seem to accept organisational perspectives regarding their relationship with participants and yet formally maintain an arm's-length contractual governance narrative that is advantageous to them.

Indeed, the onset of the Covid-19 crisis in early 2020 affected the sharing economy acutely as lockdowns and social distancing threatened the livelihoods of those dependent on freelance labour provided via platforms such as Uber or TaskRabbit. The crisis sharpened the need for platforms

67 Arun Sundarajan, 'Digital and Socio-economic Foundations' in Sundarajan (2016), ch2.

68 Giulia Leoni and Lee D Parker, 'Governance and Control Of Sharing Economy Platforms: Hosting on Airbnb' (2019) 51 *British Accounting Review* 100814.

69 Eric Tucker, 'Uber and the Unmaking and Remaking of Taxi Capitalisms: Technology, Law, and Resistance in Historical Perspective' in Finn Makela, Derek McKee and Teresa Scassa (eds), *Law and the Sharing Economy* (Ontario: University of Ottawa Press 2018), ch11.

70 Above.

71 Harry Arthurs, 'The False Promise of the Sharing Economy' in Makela et al. (2018), ch2.

72 '"My Life is Spent in this Car': Uber Drives Its Indian Workers to Despair' The Guardian (4 February 2018).

73 Derek McKee, 'Peer Platform Markets and Licensing Regimes' in Makela et al. (2018), ch1.

74 Sabrina Tremblay-Huet, 'Making Sense of the Public Discourse on Airbnb and Labour: What about Labour Rights?' in Makela et al. (2018), ch12.

75 'Uber, Lyft to Offer Some Drivers Shares in Stock Market Listing' (Reuters, 28 February 2019) at www.reuters.com/article/us-uber-ipo/uber-lyft-to-offer-drivers-shares-in-stock-market-listing-wsj-idUSKCN1QH1S6.

to respond as to whether they would take on more 'organisational'-type responsibility for their participants' welfare or whether they would maintain a merely arm's-length contractual relationship. We observe that Uber in the UK offered to provide 14 days of financial assistance for self-isolating drivers.[76] This would be consistent with organisational responsibility for employed personnel. TaskRabbit introduced a webchat model to allow tradesmen to teach householders how to carry out certain tasks, for a fee,[77] adapting its business model for the benefit of all of its participants. It may be argued that platforms are only responding to corporate citizenship expectations from society or indeed, utilitarian motives in order to preserve business continuity. However, being citizenly itself blurs the boundaries between market-driven behaviour and behaviour driven by recognition of asymmetry in power and capacity to provide. The platform business model gives rise to many issues in the interface of markets and hierarchies that are not fully addressed by the extant state of contractual governance.[78]

The advent of distributed ledger technology has taken the platform economy one step further by enabling and empowering a disintermediated economic model. The Bitcoin blockchain[79] first allowed a new cadre of economic actors to be introduced (nodes),[80] defined a new paradigm of production and wealth creation (mining),[81] and created a unique environment for exchange and community without the need for centralised institutions of trust and enforcement.[82] The Bitcoin blockchain ushered in a new technology for economic interaction that is potentially disruptive, representing a step beyond the platform economy. It represents a distinct revolution moment, as the blockchain offers a disintermediated way of connection and is yet maintained by automation protocols that foster trust and reliability,[83] challenging the notion that economic actorhood and activity need to be conventionally organised or ordered.

76 www.uber.com/gb/en-gb/coronavirus/.

77 https://support.taskrabbit.com/hc/en-gb/articles/360040752692.

78 See Chapter 7.

79 Satoshi Nakamoto, 'Bitcoin: A Peer to Peer Electronic Cash System' (2008) at https://bitcoin.org/bitcoin.pdf.

80 I.e. anyone who wished to connect his/her computer to the blockchain.

81 New value can be created on the blockchain by performing maintenance tasks based on cryptographic validation, i.e. the performance of those tasks led to reward in value that can be used on the blockchain.

82 This is because the blockchain relies on a system of decentralised work of verification and validation that is aimed at being tamper-proof.

83 The distributed ledger is a concept whereby all nodes maintain the same copy of transactions and last-done status of the ledger, so that all records are immutable, indelible and cannot be arbitrarily adjusted. This is described as 'trustless trust', but see limitations discussed in Kevin Werbach, 'Trust, But Verify: Why the Blockchain Needs the Law' (2018) 33 *Berkeley Technology Law Journal* 489.

The development of the Ethereum blockchain[84] is the next significant and crucial step for the revolutionising potential of distributed ledger technology (DLT). The blockchain can now support a variety of economic activity more complex than the initially dominant activity of payment transfer, allowing for smart contracts[85] to be coded and executed to effect a range of economic activity, including future or conditional contractual performance. This development facilitates new business and commercial activity conducted over the blockchain, and new businesses have arisen to innovate in that space.[86] For example, the Ethereum blockchain can be used to create a global network of disintermediated providers of (largely) virtual goods, such as CryptoKitties. We discuss how blockchain facilitates peer-to-peer trading of excess solar energy harvested by individuals for example, so that buying and selling are executed on the blockchain but delivery is carried out by connections that are 'off-chain'.[87]

Core to these new business models is the use of 'tokens', which are the native 'coin' in the ledger. What this means is that the 'coin', a standardised piece of code, embodies an entitlement to participate in the ledger as well as a unit of value for transfer. The issuance, holding and transfer of tokens are powered by the smart contract code in the token, automating most of the participatory actions in the DLT-based business model. This gives rise to a phenomenon of 'code as law',[88] where contractual governance is taken to an automated level. Commentators query how this form of extreme closed contracting can accommodate wider contractual governance issues such as open-textured contracting and dispute resolution.[89] Further, 'code as law'

84 See www.coindesk.com/information/who-created-ethereum.

85 These are pieces of code or algorithms designed to execute certain commands if certain conditions are met, resulting in the execution or formation of legal obligations, hence 'smart contracts', see Nick Szabo, 'Smart Contracts: Building Blocks for Digital Markets' University of Amsterdam (1996) at www.fon.hum.uva.nl/rob/Courses/InformationInSpeech/CDROM/Literature/LOTwinterschool2006/szabo.best.vwh.net/smart_contracts_2.html.

86 Developmental businesses have also come into the limelight, as they engage in development financing, soliciting funds from the public by preselling their native coin; see Bastien Buchwalter, 'Decrypting Cryptoassets: A Classification and Its Implications' (2019) at https://ssrn.com/abstract=3271641. There is a lot of literature mapping the universe of token sales, also known as 'initial coin offerings'; see S Adhami et al., 'Why Do Businesses Go Crypto? An Empirical Analysis of Initial Coin Offerings' (2018) 100 *Journal of Economics and Business* 64; Dirk Zetzsche et al., 'The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators' (2017) at http://ssrn.com/abstract=3072298.

87 Such as WePower, or Electron.

88 Primavera de Filippi and Aaron Wright, *Blockchain and the Law* (Cambridge, MA: Harvard University Press 2018), ch9.

89 Florian Möslein, 'Legal Boundaries of Blockchain Technologies: Smart Contracts as Self-Help?' in A De Franceschi, R Schulze, M Graziadei, O Pollicino, F Riente, S Sica and P Sirena (eds), *Digital Revolution: New Challenges for Law* (Cambridge: Intersentia 2019); Michèle Finck, *Blockchain Governance and Regulation in Europe* (Cambridge: CUP 2018); Daniel Kraus, Thierry Obrist and Olivier Hari (eds), *Blockchains, Smart Contracts, Decentralised Autonomous Organisations and the Law* (Cheltenham: Edward Elgar 2019).

may not cater for 'off-chain' legs of the contractual transactions. It is further queried if the DLT-based business model is a 'marketplace' or indeed a 'community' where participants co-create goods and services and therefore enhance the value of the collective community by their creative efforts and network effects.[90] If so, the needs for relational contracting may not be fully catered for in the smart contracting mode.[91]

Although the above business models are all different, and distinct discussions in law can be made extensively in relation to each of them, this book offers the unifying theme that the relative lack of applicability of the law of organisations to them should be critically questioned. We have only provided an outline of the gaps in contractual governance, as this work has been carried out in previous literature,[92] and our focus is on what the law of organisations and governance can offer to DBMs. Further, we also discuss in this volume the need to develop a menu of business models in the law of organisations and governance, due to the perceived limitations of the for-profit corporate form.[93] The development of the Community Interest Company in the UK under the Labour government in 2005[94] and the more recent development of the benefit corporation model in the US[95] signal the need for entrepreneurs and investors to consider business forms that are distinguished from the for-profit corporation, which may prove to be unattractive due to its baggage of intellectual framing, such as shareholder primacy.[96] These developments are both exciting and emerging, as governance

90 Alyse Killeen, 'The Confluence of Bitcoin and the Global Sharing Economy' in David Lee (ed), *The Handbook of Digital Currencies* (Singapore: Elsevier 2015), ch24.

91 See Chapter 9.

92 Amstutz and Teubner (2009), Cafaggi (2011).

93 Leo Strine Jnr, 'Our Continuing Struggle with the Idea that For-Profit Corporations Seek Profit' (2012) 47 *Wake Forest Law Review* 135; in relation to the debate regarding whether corporations should serve a narrowly defined interest to maximise shareholder wealth.

94 Companies (Audit, Investigations and Community Enterprise) Act 2004.

95 Model Benefit Corporation Legislation v2017, which is used as the basic template for most of the US States' benefit corporation legislation, at http://benefitcorp.net/sites/default/files/Model%20benefit%20corp%20legislation%20_4_17_17.pdf, s102, 201 for example.

96 Henry H Hansmann and Reiner H Kraakman, 'The End of History for Corporate Law' (2000) 89 *Georgetown Law Journal* 439 arguing that the shareholder-centric model of corporate governance is regarded as the 'end of history for corporate law', as such a model, focused singularly on private economically driven interests, seemed best placed to drive economic purpose, productivity and organisation in companies. In the UK, see Andrew Keay, 'Shareholder Primacy in Corporate Law: Can it Survive? Should it Survive?' (2009) at http://ssrn.com/abstract=1498065. See critical accounts, for example, in Benedict Sheehy, 'Private and Public Corporate Regulatory Systems: Does CSR Provide a Systemic Alternative to Public Law' (2016) 17 *UC Davis Business Law Journal* 1; Lyman Johnson, 'Corporate Law and the History of Corporate Social Responsibility' (2017) at http://ssrn.com/abstract=2962432. The general lack of a wider socially facing dimension in corporate law is analysed in Jingchen Zhao, 'Promoting More Socially Responsible Corporations Through a Corporate Law Regulatory Framework' (2017) 37 *Legal Studies* 103.

and relational norms in these alternative organisational forms are still in development.[97] However, one of the conclusions of our book is that a larger menu of options in terms of corporate forms needs to developed by the law of organisation in order to cater for the business transformations that are observed in DBMs.

Structure and progression of the book

This volume brings together a host of decentralised business models that are framed by a combination of existing organisation laws and contractual governance, which cater on the one hand for the 'organisational' aspects of such business models that are legally recognised and on the other hand for the 'market-based' aspects of such business models that tend towards atomisation of transactions and self-governance. The combination of legal framing is, however, inadequate, as neither organisations nor contract law reflect the holistic needs of such business models in terms of their relational dynamics and the micro-foundations of economic activity in these models. These models present a suite of realities in economic sociology that are inadequately interrogated in law, although we do not argue that the law must follow and map such realities as such.

Chapter 2 discusses the default modus of governance in DBMs, which is contractual governance, and its inadequacies. We argue that the law of organisations and governance is relevant for conceptualising DBMs and draw upon theoretical frameworks in economic sociology. We also make broad proposals in relation to business-business models and peer-to-peer models in relation to organisational innovation and governance norms. Chapter 3 focuses on the limitations of private law, especially contract law, in governing decentralised business models. In view of technological evolutions that are likely to introduce more change to the way business relations and arrangements are configured, this chapter raises the question how far regulatory laws which represent an order from the vantage point of public interest should provide a governing order.

Chapter 4 turns its focus to business networks/interfirm alliances and interrogates needs in relation to the fundamental tenets of legal personality and relational governance. We propose that organisational and governance reforms may be needed to cater for the needs of business networks/interfirm alliances. Chapter 5 deals with the global supply chain and discusses business needs and their interface with externalities. The chapter also looks at whether solutions in organisational reform such as parent company responsibility, enterprise liability or governance, such as in supply chain

97 Dana Brakman Reiser, 'Benefit Corporations: A Sustainable Form of Organisation?' (2011) 46 *Wake Forest Law Review* 591; Dana Brakman Reiser and Steven A Dean, *Social Enterprise Law* (Oxford: OUP 2017).

management, may be effective. Chapter 6 then takes on the networked-arrangements between the public and private sector, usually in terms of engaging the private sector to deliver public services. Chapter 6 discusses the weaknesses of the predominantly contractual governance of public–private partnerships, which involves private-sector finance, risk-taking and operational capabilities to different extents in providing public goods and services. While such combinations provide for financial, efficiency and risk allocation needs, they often neglect the embedded needs of public expectations and stakeholders in relation to public goods and services. The chapter reflects upon incremental reform in the governance of UK public–private partnerships to show how organisational and governance needs are being addressed, and should be reformed.

Chapter 7 then deals with peer-to-peer business models in the platform economy. Online platforms are discussed as straddling ambiguously between being marketplaces and organisational phenomena. The interposition of the platform as a corporate giant can also be distorting for governance and distribution needs. Chapter 8 discusses alternative business vehicles for the platform economy, arguing that alternative ethos underpinning these business vehicles can reshape the organisational and governance tenets in platform economies in different ways. Chapter 9 then continues with the theme of peer-to-peer business models by discussing the new economic phenomena in the space powered by distributed ledger and blockchain technology. This new infrastructure allows decentralised economic activity and innovations to flourish, but these spaces are currently highly contractually constructed, in particular relying on automated smart contracts. This chapter critically discusses the issues arising in permissionless blockchains which raise significant governance issues, and how permissioned blockchains are developing a middle way to become both marketplaces as well as to sustain shared governance standards and expectations. The chapter critically discusses the need for regulative order, echoing the discussion in Chapter 3. Finally, Chapter 10 draws together the insights and arguments in the foregoing chapters and concludes the volume.

2 Decentralised business models and the role of the law of organisations and governance

Iris H-Y Chiu

This chapter provides a theoretical framework for discussing why the 'organisational' perspective is important and necessary for decentralised business models. In particular, we draw upon the literature from economic sociology. We do not argue that these insights alone should result in the law 'following' and constructing an organisational paradigm for each 'organisational' form that is stabilised in sociological understanding.[1] Rather, we argue that certain stabilised observations of 'organisational' characteristics in sociological understandings should be mapped against the law's treatment of equivalent characteristics, especially in the law of organisations and its governance norms, to consider if these may give rise to legal concepts that can ultimately meet the business and social expectations of such decentralised business models.

Why the law of organisations and governance is relevant to decentralised business models

The law of organisations and governance is relevant to decentralised business models, as it can offer a 'stabilised' governing framework which respects the realities of business arrangements discussed in the literature in economic sociology. We are not suggesting (in the manner opposed by Teubner) that economic sociological classifications are themselves legal concepts. However, as economic-sociological classifications have challenged the binary paradigm of market-hierarchy (which the law has largely aligned with), lawyers should critically question whether the legal frameworks for contract law on the one hand, and organisations law on the other hand, are able to interrogate those characteristics that lie in between markets and hierarchies and meet the facilitative and governing needs of such arrangements.

1 As Teubner reiterates that 'a network is not a legal concept', see Marc Amstutz and Gunther Teubner (eds), *Networks: Legal Issues of Multilateral Co-operation* (Oxford: Hart Publishing 2009), ch1. This statement argues that the law does not simply adopt sociological classifications and legalise them but instead interrogates them within the concepts of law.