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ARTICLES:

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ROGER M. BARKER & IRIS H-Y CHIU

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CORPORATE GOVERNANCE AND FIRM INNOVATION: ARE CONVENTIONAL CORPORATE GOVERNANCE STANDARDS A HINDRANCE?

Roger M Barker* and Iris H-Y Chiu**

I. INTRODUCTION

Technological and scientific innovation is widely recognised as a major determinant of productivity growth and economic competitiveness.¹ For companies that are capable of harnessing it, innovation is the magical ingredient that underpins new products and business models.² An enterprise that is able to innovate in a commercially-viable manner is well-placed to outperform its competitors and create value for investors, customers and other stakeholders.³ Innovation is therefore important to securing the long-term success of many companies.

The innovative capacity, development and harnessing of innovation in companies is shaped not only by market incentives but also by internal firm governance structures.⁴

Successful companies that innovate well are often associated with the following characteristics:

- (a) An entrepreneurial spirit in corporate leadership and the workforce, and an enterprising culture in the firm generally. This also means a willingness to explore and take risks, and to dare to venture into the 'weird' and different:⁵
- (b) A dedication of investment into research and development, in terms of generally advancing scientific research but also in specific innovations;⁶

^{*}DPhil (Oxford); Managing Director, Barker & Associates Ltd, Honorary Associate, Centre for Ethics and Law, University College London

^{**} Professor of Corporate Law and Financial Regulation, University College London

¹Nathan Rosenberg, *Innovation and Economic Growth*, OECD (2004), *available at* https://www.oecd.org/cfe/tourism/34267902.pdf.

² FEDERICO MUNARI & MAURIZIO SOBRERO, CORPORATE GOVERNANCE AND INNOVATION in CORPORATE GOVERNANCE, MARKET STRUCTURE AND INNOVATION (Jan. 29, 2003); see generally Gary Pisano, You Need an Innovation Strategy, HARV. Bus. Rev. (2015).

³ Greg Statell, *Innovation Is The Only True Way To Create Value*, FORBES (Nov. 29, 2015); Kathryn M. Kelm, V. K. Narayanan & George E. Pinches, *Shareholder Value Creation during R&D Innovation and Commercialization Stages*, 38 ACAD. MGMT. REV. 770 (1995) (explaining how the different stages of innovation development and commercialisation create shareholder value).

⁴ See generally Fillipp Belloc, Corporate Governance and Innovation: A survey, 26 Journal of Economic Surveys 835 (2012).

⁵ See generally Charles Yablon, Innovation, the State and Private Enterprise: A Corporate Lawyer's Perspective, 40 DEL. J. CORP. L. 1017 (2016).

⁶See generally Marianna Makri, Peter J. Lane & Luis R. Gomez-Mejia, CEO Incentives, Innovation, and Performance in Technology-Intensive Firms: A Reconciliation of Outcome and Behavior-Based Incentive Schemes, 27 STRATEGIC MGMT. J. 1057 (2006).

(c) A long-termist ⁷ approach to developing and growing the company.⁸

These qualities suggest an intimate connection between corporate governance and innovation in companies. A number of corporate governance factors affect a company's investment or spend in research and development, and the level of innovation output (such as in the number patents filed). Empirically accepted *firm-based* factors that promote innovation may, however, be incompatible with well accepted corporate governance standards that are upheld in major securities markets such as in the US and UK.

Questions can be raised as to whether certain conventions in corporate governance standards promote or hinder innovation in companies. ⁹ Corporate governance standards have become increasingly convergent around a shareholder-centred model of accountability around the world, ¹⁰ partly due to the theoretical appeal of the 'agency-based' perspective of economic relations ¹¹ within the firm and the practical financial interests of shareholders¹² that champion this model of corporate governance. The globally dominant corporate governance standards are referred to in this article as based on a 'shareholder-centred agency-based' model. This article explores where the tensions lie between these globally dominant corporate governance standards and the firm-based factors that promote innovation, and fleshes out the implications for these standards and the continuing trend of standardisation.

Section A discusses the nature of 'shareholder-centred agency based' corporate governance standards and their rise in international capital

⁷ A person who acts or makes decisions with a view to long-term aims or consequences; one who takes a long-term view.

⁸ Nicolette C. Prugsamatz, *In (Ex)ternal Corporate Governance and Innovation: A Review of the Empirical Evidence* (2015), *available at* http://ssrn.com/abstract=2664401. The article points out, in this detailed review, that much of innovation is carried out with a view to long-term success.

⁹ Joseph McCahery & Erik P. Vermeulen, Corporate Governance and Innovation Venture Capital, Joint Ventures, and Family Businesses (European Corp. Gov't Inst., Working Paper No.65/2006, 2006); Houman B Shadab, Innovation and Corporate Governance: The Impact Of Sarbanes-Oxley, 10 U. PA. J. BUS. EMP. L. 955 (2008); Stefano Bianchini et al, Corporate Governance, Innovation and Firm Age: Insights and New Evidence, (GREDEG Working Paper No. 2015-05) (2015), available at http://www.gredeg.cnrs.fr/working-papers.html.

¹⁰ Klaus Hopt, *Comparative Corporate Governance: The State of the Art and International Regulation*, 59 Am. J. COMP. L. 74 (2011) (see Section C).

¹¹ See id. at Section B; see also Allen Kaufman & Ernie Englander, A Team Production Model of Corporate Governance 19 ACAD. MGMT. EXECUTIVE 9 (2005) (explaining the rationale for the theoretical appeal).

¹² The rise of institutional investors and asset managers as major global shareholders is a key factor for influencing corporate governance standards maintained by many securities markets. Global securities markets have therefore been subject to competitive pressures in enhancing these standards and moving towards convergence in various degrees. *See*, *e.g.*, Mary O'Sullivan, *The Political Economy of Comparative Corporate Governance*, 10 REV. INT'L POL. ECON. 23 (2003); *see* Hopt, *supra* note 10, at Section C.

markets. This Section argues that although the key characteristics of such standards are not necessarily antagonistic to promoting innovation, the underlying theoretical model has little to contribute to promoting innovation. This is because it focuses excessively on incentive-based individual economic behaviour, neglecting the enterprise context of the firm. This underlying theoretical model does not cater adequately for advancing the needs of coordination within the enterprise and the pursuit of collective enterprise success, ultimately affecting the usefulness of corporate governance standards based on such a model.

Section B argues that there is significant consistency between a resource-based theoretical perspective of the firm and empirical research findings on the corporate governance factors relevant for promoting innovation. It will discuss the nature and key characteristics of this theoretical perspective and how it practically supports the promotion of firm innovation. We highlight the tensions between the needs of firm innovation and the application of 'shareholder-centred agency-based' corporate governance standards.

Section C proceeds to suggest how 'shareholder-centred agency based' corporate governance standards may be adjusted to reflect the needs for promoting firm innovation. We argue that the resource-based theoretical perspective pursues the same ultimate objective as 'shareholder-centred agency-based' corporate governance model, i.e., corporate success, but more accurately and holistically takes into account of the productive activities and enterprise of the firm. This article will advocate that corporate governance standards should embody both individualistic and collective economic behaviour in order to better cater for the needs of promoting innovation. This article will make some suggestions for key adjustments in particular with relation to boards. Boards, shareholders and stakeholders can all be viewed differently from a resource-based perspective, giving us a new basis for the adjustment of prevailing corporate governance standards. Boards should ensure that companies have adequate access to a range of resources for innovation and also have a role to play in monitoring that such resources are harnessed and well-utilised. This article will critically examine the template in the UK Corporate Governance Code and make suggestions on adjusting provisions on board structures, responsibilities and composition, so that boards can better serve the purposes of firm innovation. Finally, this Section also reflects on the implications of our arguments for the observed trend of global standardisation of 'shareholdercentred agency-based' corporate governance standards. We are of the view that excessive prescriptions in corporate governance standards are probably sub-optimal for promoting innovation, but we propose a moderated form of standardisation that caters to the needs of global securities markets. Section D concludes.

¹³ William Lazonick & Mary O'Sullivan, Corporate Governance, Innovation and Economic Performance in the EU, CGEP REPORT (2004).

II. CONVENTIONAL CORPORATE GOVERNANCE STANDARDS AND FIRM INNOVATION

The theoretical importance of corporate governance can be traced back to Berle and Means' investigation, in the 1930s, of the implications of the 'modern corporation' for the allocation of powers within a corporate structure, ¹⁴ As Moore and Petrin ¹⁵ point out, although a number of theoretical models of corporate governance have been debated upon over the years in academia, across inter-disciplinary fields in economics, law and organisation, the model of corporate governance that has influenced most profoundly the modern development of corporate law and governance standards (which may be in Listing Rules of securities markets or 'soft law', i.e., in non-binding codes of best practices) is the 'orthodox' contractarian model of corporate governance.16

The 'orthodox' contractarian model of corporate governance highlights corporate governance as essentially economic and contractual relations.¹⁷ In 1937, Coase's seminal work "The Nature of the Firm" ¹⁸ provided the foundation upon which the contractarian conception of the corporation became a dominant intellectual paradigm. The firm is characterised as a nexus of transactions that are 'internalised' because of the transaction cost-efficiencies of such arrangements compared to marketbased contracting.19

The contractarian approach sees the firm as a nexus of contracts entered into by volition, and as a structure that internalises a web of these arrangements. 20 The individuality of these economic transactions remain paramount in relation to allocation of powers and rights and this model does not treat the firm as a collective institution of its own salience. Hence, the role of corporate law, boosted by the rise of the law and economics movement, deals with making such contractual relations efficacious. Staunch contractual theorists in corporate law support the role of corporate law as an enabling or facilitative framework so that contracting parties may

¹⁴ ADOLF A. BERLE & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1932).

¹⁵ MARC T. MOORE & MARTIN PETRIN, CORPORATE GOVERNANCE: LAW, REGULATION AND THEORY (2017).

¹⁶ See Frank H. Easterbrook & Daniel R. Fischel, The Corporate Contract in THE ECONOMIC STRUCTURE OF CORPORATE LAW 1ff (1991).

¹⁷ BRIAN R. CHEFFINS, COMPANY LAW: THEORY, STRUCTURE AND OPERATIONS ch 2 (Oxford: Clarendon Press 2000) (see discussion of the 'bargaining relations' of corporate constituents).

¹⁸ See generally Ronald Coase, The Nature of the Firm in 4:16 ECONOMICA 386 (1937). ¹⁹*Id*.

²⁰ *Id*.

decide how their relations may be governed.²¹ Brudney²² and Bebchuk²³ have pointed out that it is a myth that constituents in a corporation actively engage in contractual bilateralism to determine the substantive governance of their relations. However, theorists argue that the contractarian model can be supported on the basis of 'hypothetical bargains.'²⁴

Hypothetical bargains are premised upon models of economic behaviour on the part of the constituents of the firm. ²⁵ From the 1970s, theoretical milestones have been reached in establishing such models of economic behaviour. Alchian and Demsetz ²⁶ analyse transactional behaviour within the firm in terms of 'complete' and 'incomplete' contracts according to the efficiency needs of each constituent and conclude that shareholders are 'special' as they make open-ended contracts to invest their capital into a firm but bear the ultimate risk of the firm's insolvency. ²⁷ Shareholders should thus be residual claimants of the firm's assets in insolvency. Jensen and Meckling further frame the residual claimant's position in the firm as subject to an 'agency' paradigm where managerial control of corporate assets could be adverse to residual claimants' interests, in cases where managers and shareholders are different persons. ²⁸

Hence, a key hypothetical bargain between shareholders and managers as championed in Easterbrook and Fischel's influential thesis is that the role of corporate law is to provide a default set of rules²⁹ that protects shareholders' residual claimant interests by having their interests form the objective for corporations. Shareholder primacy frames the corporate objective of the company, which as Easterbrook and Fischel argue, is 'shareholder wealth maximisation' as the default and commonly accepted norm that most investors would subscribe to.³⁰ This objective provides a single-minded focus for managers and is an efficient axis for

²¹ William A. Klein, *The Modern Business Organization: Bargaining Under Constraints*, 91 YALE L. J. 1521 (1982); Fred McChesney, *Contractarianism Without Contracts? Yet Another Critique Of Eisenberg*, 90 COLUMBIA L. REV. 1332 (1990); Manuel A. Utset, Towards a Bargaining Theory of the Firm, 80 Cornell L. Rev. 540 (1995).

²² Victor Brudney, *Corporate Governance, Agency Costs, and the Rhetoric of Contract*, COLUMBIA L. REV. 1403 (1985).

²³ Lucian Ayre Bebchuk, The Debate On Contractual Freedom In Corporate Law, 89 COLUMBIA L. REV. 1395 (1989); Lucian Ayre Bebchuk, *Limiting Contractual Freedom In Corporate Law: The Desirable Constraints On Charter Amendments*, 102 HARV. L. REV. 1820 (1989).

<sup>(1989).

&</sup>lt;sup>24</sup> David Charny, *Hypothetical Bargains: The Normative Structure of Contract Interpretation*, 89 MICHIGAN L. REV. 1815 (1991).

²⁵ *Id*.

²⁶ Armen A. Alchian & Harold Demsetz, *Production, Information Costs and Economic Organisation*, 62 Am. ECON. REV. 777 (1972).

²⁷ Id.

²⁸ Michael Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs & Ownership Structure*, 3 J. OF FIN. ECON. 305, 312 (1976).

 $^{^{29}\}mbox{Frank}$ H. Easterbrook & Daniel R. Fischel, The Econ. Structure of Corp. L. 1-39 (1991).

³⁰ Id.

economic organisation.³¹ In this light, managers are disciplined, especially in publicly traded corporations, by the share price of the company that embodies information signals as to financial performance, a proxy indicator for shareholders to determine if managers are indeed effectively maximising the wealth of the corporation.³²

The agency paradigm also frames corporate governance needs as revolving around controlling managerial 'agency' problems. ³³ This is realised through the allocation of powers in company law in favour of shareholders as well as the financial discipline of shareholder primacy upon directors. In the UK, for example, shareholders are (a) the subjects of directors' accountability,³⁴ (b) the organ to exercise key powers in certain

³¹ See Oliver Williamson, Corp. Governance, 93 YALE L. J. 1197, 1221 (1984).

 $^{^{\}rm 32}\,\rm This$ is our understanding of the agency theory as it applies to publicly listed companies.

³³ Jensen & Meckling, *supra* note 28, at 312-13.

³⁴ The Companies Act 2006, § 172 (U.K.) explicitly provides that directors' duties are to promote the long-term success of the company for the benefit of the members as a whole. This has come to be coined as 'enlightened shareholder value,' a long-termist and more inclusive perspective for corporate performance, but revolving around shareholders. But most commentators are of the view that the focus on 'shareholder value' will unlikely introduce any revolutionary move in directors' conduct towards stakeholders. See e.g., Paul Davies, Enlightened Shareholder Value & the New Responsibilities of Director (2005), available at http://law.unimelb.edu.au/_data/assets/pdf_file/0014/1710014/94-Enlightened_Shareholder_Value_and_the_New_Responsibilities_of_Directors1.pdf; Richard Williams, Enlightened Shareholder Value in UK Company Law, 35 UNSW L. J. 360, 360 (2012); Andrew Keay, Section 172(1) of the Companies Act 2006: An Interpretation & Assessment, 28 Co. L., 106, 106-07, 110 (2007); Elaine Lynch, Section 172: A Ground-Breaking Reform of Director's Duties, or the Emperor's New Clothes?, 33 Co. L. 196, 196, 198 (2012).

aspects of decision-making in the company, 35 and (c) the constituents whose capital return interests should form the basis for corporate management.³⁶

The shareholder-centred agency-based model of corporate governance is most closely reflected in Anglo-American corporate law and corporate governance standards maintained by US and UK securities markets.³⁷ Although Bruner argues that the extent of shareholder powers enjoyed in the UK is more extensive than in the US, 38 the US corporate sector accepts the legitimacy of 'shareholder value creation' as a key corporate objective, 39 and accountability lies to shareholders for the exercise of managerial powers.⁴⁰ Indeed, shareholders' formal powers⁴¹ and their

Act 2006 §168 (U.K.), https://www.legislation.gov.uk/ukpga/2006/46/section/168); the power to approve of certain transactions such as loans and guarantees to directors or substantial transactions to directors, long-term incentive arrangements and payments for loss of office, The Companies Act 2006 § 188 et al. (U.K.), https://www.legislation.gov.uk/ukpga/2006/46/section/188); the power to ratify directors' breaches of duties or defaults, The Companies Act 2006 § 239 (U.K.), https://www.legislation.gov.uk/ukpga/2006/46/section/239); the power to direct management in a specific matter by special resolution, The Companies (Model Articles) Regulations 2008, art. 4, http://www.legislation.gov.uk/uksi/2008/3229/schedule/3/part/3/made); and a power to approve (or otherwise) directors' remuneration packages on a three-yearly basis, The Company Act 2006 § 439A, https://www.legislation.gov.uk/ukpga/2006/46/section/439A). Shareholders also have extensive powers to determine capital restructuring, such as approval of capital

35 Such key aspects include the appointment and removal of directors, The Companies

reduction or redemption of shares, The Company Act 2006 § 641 et al., https://www.legislation.gov.uk/ukpga/2006/46/section/641; see also § 659, https://www.legislation.gov.uk/ukpga/2006/46/section/659); and are the key organ to determine if a takeover of the company is approved, see John Armour, Simon Deakin & Suzanne J. Konzelmann, Shareholder Primacy and the Trajectory of UK Corporate Governance 1, 4 (2003), available at http://www.cbr.cam.ac.uk/fileadmin/user_upload/centrefor-business-research/downloads/working-papers/wp266.pdf.

³⁶ Shareholders are treated by economists as "residual claimants," meaning that their supply of capital to the company is under an open-ended arrangement which renders them liable to be ultimate losers if the company should fail. The "residual claimant" status of the shareholders therefore requires protection so that managers do not abuse the privilege of being in control of the use and application of capital. See Alchian & Demsetz, supra note 26, at 787-88; see also Williamson, supra note 31, at 1228.

37 Henry Hansmann & Reiner Kraakman, The End of History for Corporate Law, 89

GEORGETOWN L. J. 439, 468 (2000).

38 CHRISTOPHER M. BRUNER, Corporate Governance in the Common Law World 66

(2013).

³⁹ Leo E Strine, Jr., Corporate Power is Corporate Purpose I: Evidence from My Hometown 5 (2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2906875; Leo Strine, Jr, Our Continuing Struggle with the Idea that For-Profit Corporations Seek Profit, 47 WAKE FOREST L. REV. 135, 155 (2012).

⁴⁰Leo Strine, Jr, Our Continuing Struggle with the Idea that For-Profit Corporations Seek Profit, 47 WAKE FOREST L. REV. 135, 156, 161 (2012) (reflects the investor-focused accountability regimes for corporations such as in securities regulation).

⁴¹ Thomas and Tricker's empirical research on shareholder voting in the U.S. concludes that shareholders' powers are more nuanced than thought, and significant influence can be exerted in proxy contests. Randall S. Thomas & Patrick Tricker, Shareholder Voting in Proxy Contests for Corporate Control, Uncontested Director Elections and Management Proposals: A Review of the Empirical Literature, 70 OKLA. L. REV. 9, 40, 88, 89 (2017).

activism is on the rise in the US, ⁴² with the growth of institutional shareholder influence in global capital markets.

The shareholder-centred agency-based model of corporate governance has found international admiration as by the end of the 1990s, ⁴³ the success of the American economy draws attention to the successes of its corporate governance model. Further, studying incidents of corporate failure highlights that poor corporate governance can be often a significant factor in firm failures. ⁴⁴ It may be too simplistic to say that adhering to the conventionally accepted standards of corporate governance in accordance with the shareholder-centred agency-based model is a panacea for boosting corporate performance, ⁴⁵ but empirical research finds consistently that returns on investment may be higher where companies implement such standards. ⁴⁶ Hence, corporate governance standards have become increasingly integral to global securities regulation as they are perceived in

⁴² From the model of "fiduciary capitalism" and "universal owners" championed in relation to pension funds, *see generally* JAMES P. HAWLEY & ANDREW T. WILLIAMS, THE RISE OF FIDUCIARY CAPITALISM: HOW INSTITUTIONAL INVESTORS CAN MAKE CORPORATE AMERICA MORE DEMOCRATIC (2000); Robert Monks, THE NEW GLOBAL INVESTORS (2001), to modern forms of shareholder activism carried out by hedge funds. *See* John Armour & Brian Cheffins, *The Rise and Fall (?) of Shareholder Activism by Hedge Funds*, 14 J. OF ALT. INVESTMENTS 17, 17 (2012); Dionysia Katelougzou, *Myths and Realities of Hedge Fund Activism: Some Empirical Evidence*, 7 VA. L. & BUS. REV. 459, 510 (2013).

⁴³ Henry Hansmann & Reiner Kraakman, *The End of History for Corporate Law*, 89 GEORGETOWN L. J. 439, 439 (2000).

⁴⁴ See generally Abe De Jong et al., Douglas V De Jong, Peter Roosenboom & Gerard Mertens, Royal Ahold: A Failure of Corporate Governance 24 (2005), http://papers.ssm.com/sol3/papers.cfm?abstract_id=663504; see also Robert Rosen, Risk Management & Corporate Governance: The Case of Enron, 35 CONN. L. REV. 1157 (2003).

⁴⁵ Lucian Bebchuk, Alma Cohen & Allen Ferrell, What Matters in Corporate Governance?, 22 REV. FIN. STUD. 783, 784, 787 (2009); Lawrence D. Brown & Marcus L. Caylor, Corporate Governance and Firm Performance 3 (Dec. 7, 2004) (unpublished manuscript), available at http://ssrn.com/abstract=586423; Sanjai Bhagat & Brian Bolton, Corporate Governance & Firm Performance 3, 8 (2007), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1017342; N. K. Chidambaran et al., Corporate Governance and Firm Performance: Evidence from Large Governance Changes 4 (Jan. 2008) (unpublished manuscript).

http://papers.ssm.com/sol3/papers.cfm?abstract_id=1108497; Charles Weir, David Laing, & David J. McKnight, An Empirical Analysis of the Impact of Corporate Governance Mechanisms on the Performance of UK Firms 5 (Oct. 10, 2001) (unpublished manuscript), available at https://papers.ssm.com/sol3/papers.cfm?abstract_id=286440; Rob Bauer, Nadja Guenster, & Roger Otten, Empirical Evidence on Corporate Governance in Europe. The Effect on Stock Returns, Firm Value and Performance 4 (Oct. 23, 2003) (unpublished manuscript), available at https://papers.ssm.com/sol3/papers.cfm?abstract_id=444543.

⁴⁶ David F Larcker, Scott A. Richardson & Irem Tuna, *How Important is Corporate Governance* 32, 38, 48 (2005), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=595821; Lawrence D. Brown & Marcus L. Caylor, *Corporate Governance and Firm Performance* 3 (2004), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=586423; Anama Shaukat & Carol Padgett, *The UK Code of Corporate Governance: Link Between Compliance and Firm Performance* 4 (2006), *available at*

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=934313; R. Madhumathi & M. Ranganatham, *Earnings Quality, Corporate Governance and Firm Performance* 2 (2011), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1867869.

capital markets to be important contributors to corporate success and performance. Capital markets promote these standards through increasing prescription or legalisation for their listed companies' adoption, in order to promote the appeal of their markets to investors.⁴⁷

Shareholder-centred agency-based corporate governance standards appeal to institutional investors, who have become the most important type of investor in global corporate equity. 48 Global assets under management total \$64 trillion according to a survey carried out by Price Waterhouse Coopers⁴⁹ and are forecast to swell to \$102 trillion by 2020. As institutions are also minority investors in corporate equity, they rely on the existence of good corporate governance standards adopted by firms as being essential to protecting their investment interests. 50 With swelling global assets under management, the investment management sector is increasingly powerful in influencing the terms upon which investments are made in securities markets. Anglo-American institutions are a significant institutional sector and they continue to demand robustly implemented corporate governance standards in listed issuers, many of which reflect the shareholder-centred agency-based model of corporate governance, focusing on subjecting directors to adequate monitoring and accountability, and empowering shareholders to exercise powers in engagement and scrutiny. ⁵¹

The internationalisation of corporate governance standards, observed by many commentators, cater to the needs of regulatory

⁴⁷ Tobias H. Tröger, *Corporate Governance in a Viable Market for Secondary Listings*, 10 U. PA J. OF BUS. & EMP. L. 89, 128 (2007) (argues that securities regulation has come to brand the U.S. listed markets).

 $^{^{48}}$ See generally Roger M. Barker & Iris H-Y Chiu, Corporate Governance and Investment Management 1–60 (2017).

⁴⁹ Price Waterhouse Coopers, *Asset Management 2020: A Brave New World* 7 (2014), *available at* https://www.pwc.com/gx/en/asset-management/publications/pdfs/pwc-asset-management-2020-a-brave-new-world-final.pdf.

⁵⁰ J. P. Hawley & A. T. Williams, Shifting Ground: Emerging Global Corporate-Governance Standards and the Rise of Fiduciary Capitalism, 37 ENV'T & PLAN. 1995, 1998 (2004); Stuart L Gillan & Laura T Starks, Corporate Governance, Corporate Ownership, and the Role of Institutional Investors: A Global Perspective, 13 J. OF APPLIED FIN. 4, 16 (2003).

⁵¹ There is much empirical evidence on the increased valuation of companies on securities markets driven by investor preferences where good corporate governance is instituted. See e.g., Fabio Bertoni, Michele Meoli, & Silvio Vismara, Board Independence, Ownership Structure and the Valuation of IPOs in Continental Europe, 22 Corporate Governance 116, 117 (2014); Lawrence D. Brown & Marcus L. Caylor, Corporate Governance and Firm Valuation, 25 J. OF ACCT. & PUB. POL'Y 409, 429 (2009) (arguing that there are only a few cherished corporate governance notions that make a difference, for example independent directors); Kee H. Chung & Hao Zhang, Corporate Governance and Institutional Ownership, 46 J. OF FIN. & QUANTITATIVE ANALYSIS 247, 251 (2011); Armand Picou & Michael J. Rubach, Does Good Governance Matter to Institutional Investors? Evidence from the Enactment of Corporate Governance Guidelines, 65 J. OF BUS. ETHICS 55, 64 (2006).

competition in globally competitive securities markets.⁵² Broad patterns of international convergence⁵³ can be found in corporate governance standards that address the agency problem of overly powerful management in widely held companies. ⁵⁴ In particular, independent board representation has become a key building block in corporate governance standards. Empirical literature has measured convergence in corporate governance standards internationally and records that notable convergence has taken place in standards that are particularly valued for minority shareholder protection.⁵⁵ However, regional fragmentations in corporate governance standards ⁵⁶ show that the dialectics of contention between issuers, investors and policy-makers will continue to sustain some of the unique differences in corporate governance standards upheld in each securities market.⁵⁷

The dominance of the agency-based perspective of corporate governance in the leading global securities markets such as New York, London, and Hong Kong has shaped both the content of corporate governance standards as well as international standardisation to some extent. Even countries that have adopted stakeholder models of corporate governance such as Japan are driving greater shareholder empowerment⁵⁸ in

⁵² Earlier literature on convergence driven by institutions are more broad-brush and optimistic. See e.g., MICHAEL USEEM, INVESTOR CAPITALISM (1999). There is also a strand of literature on nuanced forms of and drivers for convergence in corporate governance standards. See e.g., T. Yoshikawa & A. A. Rasheed, Convergence of Corporate Governance: Critical Review and Future Directions, 17 CORP. GOVERNANCE 388 (2009); Ilir Haxhi & Ruth V. Aguilera, Are Codes Fostering Convergence in Corporate Governance? An Institutional Perspective (Dec. 20, 2011) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2026352; Gerald Davis & Christopher Marquis, The Globalization of Stock Markets and Convergence in Corporate Governance (2003), available at http://www.economyandsociety.org/wp-content/uploads/2013/08/wp7.pdf; Weil Gotshal & Manges, Comparative Study Of Corporate Governance Codes Relevant to the European Union and Its Member States 6, (2002), available at http://ec.europa.eu/internal_market/company/docs/corpgov/corp-gov-codes-rpt-part1_en.pdf (pointing out significant convergence in Codes although not in company law).

⁵³ See Klaus Hopt, Comparative Corporate Governance: The State of the Art and International Recognition, 59 Am. J. COMP. L. 1 (2011); see also O'Sullivan, supra note 12.

⁵⁴ See Paul L. Davies & Klaus J. Hopt, Corporate Boards in Europe - Accountability and Convergence, 61 Am. J. of Comp. L. 301, 303-04 (2013) (such as the institutionalisation of independent Board representation and the independent audit committee of the Board).

⁵⁵ See Mathias M. Siems, Convergence in Corporate Governance: A Leximetric Approach, 35 J. OF CORP. L. 729, 731-34 (2010); Carsten Gerner-Beuerle, Diffusion of Regulatory Innovations: The Case of Corporate Governance Codes, at *6-7 (2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2346673.

⁵⁶ See generally Gerner-Beuerle, supra note 55, at *39.

⁵⁷ Toru Yoshikawa & Abdul A. Rasheed, *Convergence in Corporate Governance: Promise and Prospects* (2012) (see detailed studies within article).

⁵⁸ See The Council of Experts Concerning the Japanese Version of the Stewart Code, Principles of Responsible Institutional Investors, available at http://www.fsa.go.jp/en/refer/councils/stewardship/20140407/01.pdf (2014) (Japanese Stewardship Code is intended to encourage greater shareholder engagement with their investee companies.).

a bid to reinvigorate the corporate sector and weed out the malaises of executive entrenchment.⁵⁹

Although the shareholder-centred agency-based model of corporate governance has influenced global standards and standardisation, it is fundamentally a model based on individualistic economic behaviour within the firm, premised upon opportunistic assumptions of human behaviour. It does not take into account whether economic behaviour adjusts in relation to the context of the 'collective enterprise' that is being pursued by constituents of the firm. ⁶⁰ The behaviour of individual economic constituents that are brought together for the common purpose of the enterprise of the firm can be shaped by the sociological dimension of their interactions and the sense of collective purpose in the common enterprise. The shareholder-centred agency-based model of corporate governance has little to say about how economic constituents engage in and organise productive activities for the purpose of enterprise, hence its relation to firm innovation is remote and skeletal at best.

Shareholder-centred agency-based corporate governance standards may hinder firm innovation⁶¹ in the following ways:

- (a) As the key tenet of such a corporate governance model is based on 'monitoring,' i.e., boards to monitor CEOs and executives, and shareholders to monitor boards so that controlling constituents of corporate assets do not use them for selfish purposes, the 'monitoring' ethos creates a culture of critical scrutiny and risk aversion, which can be disincentivising for fostering an entrepreneurial spirit or culture.⁶²
- (b) A 'monitoring' model of corporate governance focuses on financial performance monitoring as a key means to monitor. This is because financial performance provides a proxy for general well-being, and monitoring at 'arms length' requires reliance upon such proxy indicators. This approach is taken by independent directors 'monitoring' the rest of the board without necessary inside knowledge⁶³ and by shareholders 'monitoring' the board. An emphasis on financial performance monitoring creates incentives towards minimising expenditure, and investment in

⁵⁹ See Bruce E. Aronson, The Olympus Scandal and Corporate Governance Reform: Can Japan Find a Middle Ground between the Board Monitoring Model and Management Model?, 30 UCLA PAC. BASIN L.J. 93, 101 (2012).

⁶⁰ See Kathleen R. Conner & C.K. Prahalad, A Resource-based Theory of the Firm: Knowledge Versus Opportunism, 5 ORG. SCI. 477, 478 (1996).

⁶¹ See generally Roger M. Barker, Re-Designing Corporate Governance to Promote Innovation, GUBERNA Position Paper, at *2 (2016).

⁶² See generally Yablon, supra note 5, at 1017.

⁶³ Barry Baysinger & Robert E. Hoskisson, The Composition of Boards of Directors and Strategic Control: Effects on Corporate Strategy, 15 THE ACAD. OF MANAG. R. 72, 77 (1990).

research and development could be regarded as costly without bringing in sure and quick returns.⁶⁴

(c) A 'monitoring' model of corporate governance that focuses on financial performance monitoring is likely to tend towards managerial short-termism as financial performance is scrutinised quarterly by shareholders.⁶⁵ Short-termism has been highlighted to be a malaise for the corporate sector as it may damage the sector's long-term success and its socially beneficial role in wealth creation for savers and investors.⁶⁶ Shareholders focused upon short-termist 'monitoring' may indeed hinder corporations from engaging in long-termist expenditures and development that may not generate returns in the short-term.

It may, however, be argued that the shareholder-centred agency-based model of corporate governance is relevant to innovation as a 'monitoring' model as it is able to check the exercise of corporate powers over assets. The aim is to ensure that corporate assets are used towards securing financial performance for the company, which protects and enhances shareholders' wealth. Where promoting innovation is relevant to the financial success of the company, a 'monitoring' model could in theory prevent corporate powers from being exercised contrary to the purposes of wealth creation. In this way, the shareholder-centred agency-based corporate governance model can contribute to promoting innovation in relation to providing the boundaries for legitimate exercises of managerial power.

The corporate finance perspective of shareholder primacy – that access to stock market finance can be improved if firms demonstrate optimal shareholder-friendly standards⁶⁸ – can be relevant for promoting innovation. As access to stock market finance can improve a company's capacity to invest in innovation, adhering to agency-based corporate governance standards that promote shareholder rights and protection is not

⁶⁴ See generally Bengt Holmstrom, Agency Costs and Innovation (1989) 12 J. OF ECON. BEHAV. AND ORG. 305 (1989).

⁶⁵ See Caitlin Helms, Mark A. Fox & Robert Kenagy, Corporate Short-Termism: Causes and Remedies, 23 INT. AND COMP. Co. L. REV. 45, 47 (2012); Emeka Duruigbo, Tackling Shareholder Short-Termism and Managerial Myopia, 100 KY. L.J. 531, *2 (2011).

⁶⁶ See Overcoming Short-termism: A Call for a More Responsible Approach to Investment and Business Management, CORPORATE VALUES STRATEGY GROUP (2009); BIS, The Kay Review of UK Equity Markets and Long-Term Decision Making (2012), available at http://www.aspeninstitute.org/publications/overcoming-short-termism-call-more-responsible-approach-investment-business-management.

⁶⁷ See Matthew O'Connor and Matthew Rafferty, Corporate Governance and Innovation, 47 J. OF FIN. AND QUANT. ANALY. 397, 398 (2012).

⁶⁸ See Soo Hee Lee and Taeyoung Yoo, Competing Rationales for Corporate Governance in France: Institutional Complementarities between Financial Markets and Innovation Systems, 16 CORP. GOV.: AN INT'L REV. 63, 72-73 (2008).

in conflict with a pro-innovation strategy. ⁶⁹ Emerging countries⁷⁰ whose stock markets are not as well-developed⁷¹ can adopt this insight so as to attract foreign capital that can fund the development of domestic corporate innovation. This seems to be especially important where stock markets are not already highly developed, especially in emerging countries.

Lazonick and Sullivan critically opine that stock market finance is not a major source of finance for innovation. ⁷² Nevertheless, the ready access to a stock market can incentivise support for innovation in other ways. For example, venture capitalists may be more willing to invest as they eventually look to stock markets for exit, and employee stock options can be used to motivate a greater sense of employee commitment and productivity.

Next, a key tenet of the 'monitoring' model of corporate governance is the institution of independent directors on the board. 73 These independent directors are regarded as well placed to ensure that executive directors are not self-serving in their pursuits. However, they could be regarded as adverse to innovation as their monitoring emphasis could distract the board from focusing on innovative and strategic directions. However, different commentators have also found in empirical research that independent directors are pro-innovation from *both* the agency-based perspective of corporate governance and the resource-based perspective discussed below. Kor finds that a significant level of board independence,

⁶⁹ See David Hillier, Julio Pindado, Valdoceu de Queiroz, and Chabela de la Torre, The Impact of Country-Level Corporate Governance on Research and Development, 42 J. OF INT'L BUS. STUDIES 76, 81 (2011); Rafael La Porta, Florence Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, Law and Finance (1998), 106 J. OF POL. ECON. 1113, 1116 (1998).

⁷⁰ See Hui He, Hanya Li, and Jinfan Zhang, Does Stock Market Boost Firm Innovation? Evidence from Chinese Firms, at *1, available at http://ssrn.com/abstract=2759516 (2016); Domagog Račić, Vladimir Cvijanović, & Zoran Aralica, The Effects of the Corporate Governance System on Innovation Activities in Croatia, (2008) 39 REVIJA ZA SOCIOLOGIJU 101, 101 (2008).

⁷¹ See Stéphane Lhuillery, The Impact of Corporate Governance Practices on R&D Intensities of

Firms: An Econometric Study on French Largest Companies, at *5, available at http:://ssrn.com/abstract=1426089 (2009).

⁷² See William Lazonick and Mary O'Sullivan, Corporate Governance, Innovation and Economic Performance in the EU, Target Socio-Economic Research Programme of the European Commission, at *37 (2004).

⁷³ See Toru Yoshikawa and Abdul A. Rasheed, Convergence of Corporate Governance: Critical Review and Future Directions, 17 CORP. GOV.: AN INT'L REV. 388, 388–04 (2009); see generally Ilir Haxhi and Ruth V. Aguilera, Are Codes Fostering Convergence in Corporate Governance? An Institutional Perspective, at *243, available at http://papers.ssm.com/sol3/papers.cfm?abstract_id=2026352 (2011), Gerald Davis & Christopher Marquis, The Globalization of Stock Markets and Convergence in Corporate Governance, at *12 (2003), available at http://www.economyandsociety.org/wp-content/uploads/2013/08/wp7.pdf.

⁷⁴ Érik Vermeulen, Mark Fenwick & Masato Hisatake, *Intelligent Cars Inc. - Governance Principles to Build a Disruptive Company* (2016), *available at* http://ssrn.com/abstract=2823006.

such as the separation of CEO from the Chairman of the board, is positively correlated with higher levels of research and development (R&D) investments. ⁷⁵ Independence on the board can promote strategic views towards the long-term good of the company and mitigates the self-serving tendencies on the board. However, a couple of commentators are skeptical that independent directors are a factor for promoting innovation, as independent directors do not have sufficient proximity to the business to be strategically useful in promoting innovation.⁷⁶

Finally, empirical research has not found an adverse impact between institutional shareholdings and the level or commitment to innovation in companies. Indeed, quite the converse, institutional shareholding seems positively related to promoting innovation. The relevance of investigating into the influence of institutional shareholding is that such shareholders are often regarded to be short-termist.⁷⁷ Institutional shareholders are subject to regular legal duties of accountability to their beneficiaries in terms of financial performance in their investments, and such accountability makes them susceptible to short-termism. Brossard et al⁷⁸ examine the relationship between ownership structures in a sample of 234 large European companies and their innovative activity in terms of R&D spending.⁷⁹ They found that institutional investors have a positive impact on companies' R&D spending. However, different institutional investors seem to create different influences, with impatient investors being antithetical to promoting innovation. Pension funds are regarded as longtermist and positive influencers, while mutual funds are short-termist and impatient. Aghion et al⁸⁰ have also come to a similar conclusion. They assembled a dataset of 800 major US firms over the 1990s containing timevarying information on patent citations, ownership, R&D, and governance, and found a robust positive association between innovation and institutional ownership.81 Their finding provides support for the validity of the agencybased perspective of corporate governance in relation to promoting innovation in companies – that the disciplinary effect of institutional share ownership, despite its short-termist tendencies, motivates the 'lazy

⁷⁵ See Yasemin Y. Kor, Direct and Interaction Effects of Top Management Team and Board Compositions on R&D Investment Strategy, 27 STRAT. MANAG. J. 1081, 1089 (2006).

⁷⁶ See Krishnamurti Chandrasekar & Haiyun Ren, Review of Relationship between Corporate Governance and R&D Input, 2 J. OF APPLIED FIN. RESEARCH at *41 (2012); Barry D. Baysinger, Rita D. Kosnik & Thomas A. Turk, Effects of Board and Ownership Structure on Corporate R&D Strategy, 34 ACAD. OF MANAG. J. 205, 213 (1991).

⁷⁷ See generally Paul Frentrop, Short Termism of Institutional Investors and the Double Agency Problem (2012), available at http://ssrn.com/abstract=2249872.

⁷⁸ See Olivier Brossard, Stephanie Lavigne & Mustafa Erdem Sakinc, Ownership Structures and R&D in Europe: The Good Institutional Investors, the Bad and Ugly Impatient Shareholders, at *6 (2013), available at https://halshs.archives-ouvertes.fr/halshs-00843984.
⁷⁹ See id. at 3.

⁸⁰ See Philippe Aghion, John Van Reenen & Luigi Zingales, *Innovation and Institutional Ownership*, 103 AM. ECONO. REV. 277, 277, 292-93 (2013).

⁸¹ Philippe Aghion et al., Innovation and Institutional Ownership, 103 AM. ECON. REV. 277, 277 (2013).

manager' to engage in innovation in order to improve corporate performance.82

The empirical literature discussed above does not point to the complete incompatibility of shareholder-centred agency-based corporate governance standards with corporate innovation. But, it may be argued that the connection between protecting shareholders and promoting innovation is still remote. The limitations of the model do not take into account of holistic perspectives regarding the organisation of collective productive activity by constituents of the firm, and may reinforce certain incentives that undercut such productive activity.

III. FIRM-BASED FACTORS SUPPORTING INNOVATION AND THE RESOURCE-BASED THEORY OF CORPORATE GOVERNANCE

Empirical literature has provided a variety of insights into the firmbased factors that support innovation. A survey of such literature shows that a resource-based theory of the firm most closely explains the salience of these factors.

The resource-based theory of the firm was first developed by commentators in business management literature who sought to shed light on why certain firms maintain a sustained competitive advantage over other firms and are therefore successful over the long term. 83 Some commentators are of the view that firms sustain a competitive advantage because they are able to exploit resources that are rare, valuable and not easily imitable or substitutable.84 These resources may range from internal resources within a firm or external resources associated with the firm that the firm is able to exploit successfully. Such resources may be 'sticky' to the firm due to the firm's unique connections with them, or their lack of mobility or homogeneity in the market.⁸⁵ The resource-based theory of the firm has been developed intensely since the 1990s, offering an alternative account of the firm other than contractarianism, 86 and can now be considered a relatively mature theory 87 of an inter-disciplinary nature, connecting

⁸² Aghion et al., *supra* note 81, at 302-03.

⁸³ Jay B Barney, Firm Resources and Sustained Competitive Advantage, 17 J. MGMT. 99, 105-07 (1991).

⁸⁴ Id.; see also Birger Wernerfelt, A Resource-Based View of the Firm, 5 STRATEGIC MGMT. J. 171, P (1984).

85 Margaret A Peteraf, The Cornerstones of Competitive Advantage: A Resource-Based

View, 14 STRATEGIC MGMT. J. 179, 185 (1993).

⁸⁶ Kathleen R. Conner & CK Prahalad, A Resource-Based Theory of the Firm: Knowledge versus Opportunism, 5 ORG. SCI. 477, 477-78 (1996).

⁸⁷ Jay Barney et al., The Future of Resource-Based Theory: Revitalization or Decline?, 37 J. MGMT. 1299, 1299 (2011).

perspectives from the disciplines of business management, organisation science, economic theories of the firm and corporate governance and law.⁸⁸

Innovation is promoted in a firm when resources with innovative potential are perceived and developed. ⁸⁹ The corporate governance of a firm is intimately connected with the perception and development of such innovative potential, as our survey from empirical research suggests. Corporate governance is the system in a firm that organises the exercise of managerial leadership and power, the structuration of functions and responsibilities within the firm and the mobilisation of human capital for corporate objectives. ⁹⁰ Corporate governance affects the level and quality of firm innovation in three ways. One is related to the firm's access to resources at all levels in the firm. The second relates to incentives (affecting all levels of individuals, especially senior management) to pursue innovation. The third relates to structures for governing innovation in firms.

A. Boards as Resource

Our survey shows that access to resources in terms of human, social, stakeholder and financial capital is important in facilitating innovation in firms. Firms that promote such access are likely to harness more innovative potential than firms that are hamstrung in pursuing such access. The shareholder-centred agency-based corporate governance standards could be a basis for hindering some forms of 'access', and creates tensions between a firm's need to promote innovation and to comply with prevailing standards in order to demonstrate an appealing system of corporate governance to securities markets.

First, board members are viewed as key resources for the firm's success. From a resource-based perspective, board members bring expertise and skills that the company can draw upon for innovative strategies. Empirical research has shown that 'inside' directors, i.e., executive directors who have knowledge of the company's business position and needs, are more important for corporate innovation than outside or independent

⁸⁸ Barney et al., *supra* note 87, at 1303; *see generally* Francisco Jos E Acedo et al., *The Resource-Based Theory: Dissemination and Main Trends*, 27 STRATEGIC MGMT. J. 621 (2006)

⁸⁹ Reginald A Litz, A Resource-Based-View of the Socially Responsible Firm: Stakeholder Interdependence, Ethical Awareness, and Issue Responsiveness as Strategic Assets, 15 J. Bus. Ethics 1355, 1356 (1996).

⁹⁰ The OECD Corporate Governance Principles defines corporate governance as "a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined." OECD, *Principles of Corporate Governance* (2015), *available at* http://www.oecd-

ilibrary.org/docserver/download/2615021e.pdf?expires=1511800123&id=id&accname=guest&checksum=C3754AE47D70883CB900294DD6F05F3F.

directors. ⁹¹ This may create tension with the convention in agency-based corporate governance which prizes independent directors as a monitoring force on boards. Indeed the UK's Corporate Governance Code requires premium-listed companies on the London Stock Exchange to fill half their boards with independent directors. ⁹² Moreover, empirical research has found that independent directors only bring about pro-innovation influence if they are appointed for their complementary expertise and skills, ⁹³ affirming a resource-based view of the importance of boards to corporate innovation. The resource-based view of board composition would entail different outcomes for board appointments from the shareholder-centred agency-based perspective which emphasises independence and directors' ability to critically scrutinise and hold to account executive decisions. ⁹⁴

Further, empirical research has found that the social capital brought in by board members is extremely useful for corporate innovation. 95 Chen 96 and Kang et al 97 find that directors' social connections and interlocking directorates allow them to bring beneficial industry knowledge and ideas to the board, generally contributing to corporate innovation. Helmers et al also find that business group affiliations and the sharing of board members across a group of related companies is positively related to corporate innovation as cross-fertilisation of knowledge and expertise takes place between the companies. 98 However, the agency-based perspective of corporate governance would unlikely support the promotion of interlocking directorates as cross-appointments on a number of boards may be seen to adversely affect the quality of directorial independence. If a board has to choose between an interlocking director with potential to promote innovation and a completely 'outside' candidate, it could face a conflict between the resource-based view of corporate governance that supports the promotion of innovation and adherence to the standards preferred by the conventional model of corporate governance.

⁹¹ Barry D. Baysinger et al., Effects of Board and Ownership Structure on Corporate R&D Strategy, 34 ACAD. OF MGMT. J. 205, 206 (1991); Houman B Shadab, Innovation and Corporate Governance: The Impact Of Sarbanes-Oxley, 10 U. PENN. J. BUS. AND EMP. L. 955 (2008).

⁹² See supra para B.1.2.

⁹³ Benjamin Balsmeier et al., Outside Directors on the Board and Innovative Firm Performance, at 7, 9-10 (2011), available at http://ssrn.com/abstract=1950583; Jun-Koo Kang et al., Friendly Boards and Innovation, J.

EMPIRICAL FIN. (2017), available at http://ssrn.com/abstract=2177857.

94 The importance of "independent" directors is discussed as a point of international convergence in Section A in relation to the dominance of shareholder-centred agency-based corporate governance standards.

⁹⁵Balsmeier et. al., *supra* note 94, at 2.

⁹⁶ Hsiang-Lan Chen, *Board Capital, CEO Power and R&D Investment in Electronics Firms*, 22 CORPORATE GOV.: AN INT'L REV. 422, 424-25 (2014).

⁹⁷ Kang et al., *supra* note 94, at PP.

⁹⁸ Christian Helmers et al., Do Board Interlocks Increase Innovation? Evidence from a Corporate Governance Reform in India (2017), available at http://ssrn.com/abstract=2309082.

There is also empirical research on incentivising corporate leadership with appropriate remuneration and tenure packages in order to promote innovation leadership. 99 Empirical research has found that incentivising CEOs with a pay-for-performance package over the long-term with longer periods of vesting improves corporate innovation such as in relation to CEOs' willingness to make corporate investments for the longterm. This may be in conflict with the agency-based perspective of corporate governance that ties pay-for-performance to shorter term financial benchmarks. 100 The two corporate governance perspectives are however in alignment in terms of CEO tenure, that entrenchment should not be encouraged via long tenures as entrenchment does not incentivise leadership in innovation. 101 However, there are mixed results as to whether CEO turnover, which reflects the effectiveness of an agency-based model of corporate governance is good for corporate innovation. Bereskin and Hsu¹⁰² has found that CEO turnover improves levels of corporate innovation but Manso 103 finds that tolerance for failures in innovative projects and retaining the CEO could help improve subsequent corporate innovation.

B. Shareholders as Resource

A resource-based view of the firm also departs from the shareholder-centred agency-based model in relation to the salience of shareholders, especially controlling ones.

⁹⁹ R. Gopalan et al, *Duration of Executive Compensation*, 69 J. Fin. 2777, 2812 (2014); Marianna Makri et al., *CEO Incentives, Innovation, and Performance in Technology-Intensive Firms: A Reconciliation of Outcome and Behavior-Based Incentive Schemes*, 27 STRATEGIC MGMT. J. 1057, 1074 (2006); Josh Lerner & J. Wulf, *Innovation and Incentives: Evidence from Corporate R&D*, 89 REV. ECON. AND STAT. 634, 638 (2007); I.J. Chen & S.H. Lin, *Managerial Optimism, Investment Efficiency, and Firm Valuation*, 18 MULTINATIONAL FIN. J. 341 (2014).

 $http://www.mfsociety.org/modules/modDashboard/uploadFiles/journals/googleScholar/845.ht\ ml.$

¹⁰⁰ David I Walker, *The Challenge of Improving the Long-Term Focus of Executive Pay* (2009), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1396663; Benjamin Bennett et al., *Compensation Goals and Firm Performance* (2015), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2433687. FORBES reports research that associates shorter-term pay benchmarks with higher pay and worse performance over the long-term, *see* Monica Wang, *Time To Rethink CEO Compensation: Those With Higher Pay and Equity Lead Worse-Performing Companies*, FORBES (Aug. 1, 2016), *available at* https://www.forbes.com/sites/monicawang/2016/08/01/time-to-rethink-ceo-compensation-those-with-higher-pay-and-equity-lead-worse-performing-companies/#6c487d525d3b.

¹⁰¹ Yasemin Y. Kor, Direct and Interaction Effects of Top Management Team and Board Compositions on R&D Investment Strategy, 27 STRATEGIC MGMT. J.1081, 1083 (2006); Nina Baranchuk et al., Motivating Innovation in Newly Public Firms (2013), available at http://ssrn.com/abstract=1784024.

¹⁰² Frederick L Bereskin & Po Hsuan Hsu, *Bringing in Changes: The Effect of New CEOs on Innovation* (2014), *available at* http://ssrn.com/abstract=1944047.

 $^{^{103}\,\}text{Gustavo}$ Manso, Motivating Innovation, 66 J. of Fin. 40 (2011), available at http://ssrn.com/abstract=891514.

Major shareholders who have controlling powers are often seen as important resources for firm innovation. ¹⁰⁴ As concentrated owners they are likely to have long-term commitment to the success of the company and willing to make R&D investments and promote innovation. ¹⁰⁵ The stability factor that major and long-term shareholders bring has been found to be positively related to innovation. ¹⁰⁶ This has been found even in relation to bank shareholdings, important in jurisdictions reliant on bank-based finance, ¹⁰⁷ and in relation to friendly corporate shareholders, such as the Japanese Keiretsu. ¹⁰⁸ Further, major shareholders such as founder families ¹⁰⁹ bring social capital to the company to support the company's business, for example by expanding the company's networks. ¹¹⁰

Concentrated ownership is viewed with suspicion under the conventional model of corporate governance, as controlling shareholders could pose agency problems to minority shareholders. A number of commentators warn that as controlling shareholders are in a position to benefit themselves by tunnelling and appropriating corporate assets, they may not be dedicated to investing corporate resources in R&D and

¹⁰⁴ This is illustrated with respect to the long-term commitment and innovative visions they bring, as discussed below.

106 Id.

¹⁰⁵ See generally Charles W.L. Hill & Scott A. Snell, Effects of Ownership Structure and Control on Corporate Productivity, 32 Academy of Management Journal 25-46 (1989); also see Munjae Lee, Impact of Corporate Governance on Research and Development Investment in the Pharmaceutical Industry in South Korea, 6 OSONG PUBLIC HEALTH RES. PERSPECT. 249-255 (2015).

¹⁰⁷ David Hillier, Julio Pindado, Valdoceu de Queiroz & Chabela de la Torre, *The Impact of Country-Level Corporate Governance on Research and Development*, 42 J. OF INT'L BUS. STUDIES 76 (2011).

¹⁰⁸ Kaoru Hosono, Masayo Tomiyama, & Tsutomu Miyagawa, *Corporate Governance and Research and Development: Evidence from Japan*, 13 ECON. OF INNOVATION AND NEW TECHNOLOGIES 141, 142 (2004).

¹⁰⁹ Dusan Isakov & Jean-Philippe Weisskopf, Are Founding Families Special Blockholders? An Investigation of Controlling Shareholder Influence on Firm Performance, 41 K1 (2014) (families or closely related individuals who are founding shareholders of the company).

company).

110 Suman Lodh, Monomita Nandy, & Jean Chen, Innovation and Family Ownership:
Empirical

Evidence from India, 22 CORP. GOV.: AN INT'L REV. 4, 20 (2014).

¹¹¹ See Enhancing the Effectiveness of the Listing Regime: A Consultation Paper, Financial Conduct Authority (Nov. 2013),

https://www.fca.org.uk/publications/consultation-papers/cp13-15-enhancing-effectiveness-listing-regime-feedback-cp12-25-and; see also Enhancing the Effectiveness of the Listing Regime and Further Consultation on Related Issues, FINANCIAL CONDUCT AUTHORITY (May 2013), https://www.fca.org.uk/publications/consultation-papers/cp13-15-enhancing-effectiveness-listing-regime-feedback-cp12-25-and; Response to CP13/15 — Enhancing the Effectiveness of the Listing Regime, FINANCIAL CONDUCT AUTHORITY (May 16, 2014), https://www.fca.org.uk/publications/policy-statements/ps14-8-response-cp13-15-%E2%80%93-enhancing-effectiveness-listing-regime (which form the background to Listing Rules reform in the UK for listed companies with controlling shareholders); Roger M. Barker & Iris H-Y Chiu, Protecting Minority Shareholders in Blockholder-Controlled Companies - Evaluating the UK's Enhanced Listing Regime in Comparison with Investor Protection Regimes in New York and Hong Kong, 10 CAPITAL MARKETS L. J. 98 (2015).

optimally promote innovation. ¹¹² Perhaps it is not unequivocal that controlling shareholders are good for firm innovation and long-term success, and much depends on the incentives at play in the market and firm contexts. It is important not to disincentivise controlling owners from bringing a beneficial form of long-termism and stability that is facilitative for innovation. In this respect certain incentives for long-term controlling shareholders may promote innovation even if these notions are seen as offensive against standards safeguarded under the agency-based corporate governance model. For example, commentators discuss the use of unequal shareholder rights and some forms of takeover protection that may be beneficial for a company's long-term success. ¹¹³

One key incentive for promoting innovation lies in the sense of 'ownership' and commitment that founder-controllers have for their firms. Empirical research has found that founder-controllers often bring with them innovative visions and a long-term commitment to making the enterprise successful, and are thus a highly valuable resource. It In particular, there is a growing trend for founders of Silicon Valley technology companies to retain control through a dual-class share structure in which voting rights exceed cash flow rights. It Founder shareholders may be motivated to insist on such voting structures due to concerns about the potential risk of short-termism in widely-held corporations. For example, Google's founder shareholders Larry Page and Sergey Brin have retained significant control of 55.7% after the initial public offer of shares despite having only 15% of the cash flow rights. They cite their long-term perspective as rationale for supporting the issue of a class of non-voting shares, which controversially started trading in April 2014. To Successful companies such as Facebook

¹¹²Filippo Belloc, Eleanora Laurenza & Maria Alessandro Rossi, *Corporate Governance Effects on Innovation when both Agency Costs and Asset Specificity Matter*, INDUSTRIAL AND CORPORATE CHANGE, FORTHCOMING, (November 2015), *available at* http://ssrn.com/abstract=2721375; Suk Bong Choi, Byung Il Park & Paul Hong, *Does Ownership Structure Matter for Firm Technological Innovation Performance? The Case of Korean Firms*, 20 CORP. GOV.: AN INT'L REV. 267, 268-69 (2012).

¹¹³Marc T. Moore & Edward Walker-Arnott, *A Fresh Look at Stock Market Short-Termism*, 41 J. of L. AND SOC'Y 416, 421 (2014).

¹¹⁴ Yasemin Y. Kor, *Direct and Interaction Effects of Top Management Team and Board Compositions on R&D Investment Strategy*, 27 Strategic Management Journal 1081, 1093 (2006); Yongwook Paik & Heejin Woo, *The Effects of Corporate Venture Capital, Founder Incumbency, and Their Interaction on Entrepreneurial Firms' R&D Investment Strategy*, ORGANIZATION SCIENCE, FORTHCOMING 1, 7 (2017), *available at* http://ssrn.com/abstract=2340900.

¹¹⁵ Fang Ying, The Listing of Alibaba in New York not only Raised Many an Eyebrow in Terms of the Amount of Capital it Amassed at its IPO, but also the Question of Whether its Stock Structure is Good or Bad for Shareholders, CUHK BUSINESS SCHOOL, http://www.bschool.cuhk.edu.hk/faculty/cbk/post.aspx?id=38D5B05EBCF4.

¹¹⁶Holger Spamann, *Alphabet/Google Exercise*, HARVARD (December 7, 2017), https://h2o.law.harvard.edu/text_blocks/30287.

¹¹⁷ Richard Waters, *Google founders look to cement control with novel share split*, FINANCIAL TIMES (April 2, 2014), https://www.ft.com/content/5ba9a078-b9f2-11e3-a3ef-00144feabdc0.

and Alibaba are also intensely controlled by their founders. ¹¹⁸ The commitment of founder-controllers is secured at a 'corporate governance price', such as greater or weighted voting rights for such founders even if this is mismatched with cash flow rights. ¹¹⁹ The common use of dual-class voting shares or in Snapchat's case, the issuance of non-voting shares to outside shareholders, are means of ensuring that founders remain in control of the firm's innovative visions and that the company is relatively insulated from outside shareholders' 'short-termism'. ¹²⁰ Minority outside shareholders view this with great scepticism as unequal shareholder rights can entail agency problems. There is a resource-based justification for incentivising such founder-controllers' commitments by allowing them to maintain control.

Although some jurisdictions have resisted dual-class shares, such as Hong Kong, ¹²¹ the key American stock exchanges and the London Stock Exchange have allowed dual-class shares for some time now. The New York Stock Exchange (NYSE) Listing Rules provide some safeguards for minority shareholders of listed companies that feature dual-class voting or concentrated ownership. The Listing Rules contain general principles to prohibit conflicts of interest, misappropriation of corporate opportunities ¹²² and director/officer share transactions surrounding corporate communications. ¹²³ Related-party transactions do not require shareholder voting except where they are issues of securities to the effect of increasing voting power by at least 1%. ¹²⁴ These transactions may be effected after scrutiny by the audit committee. ¹²⁵ Given the traditional US context of

¹¹⁸ There is contrary empirical evidence that shows worse long-term performance by firms that have used dual-class shares, *see* Paul A. Gompers, Joy Ishii & Andrew Metrick, *Extreme Governance: An Analysis of Dual-Class Firms in the United States*, 23 Rev. of Fin. Studies 1051, 1061-62 (2010); *see also The Cost of Control*, The Economist (July 21, 2011), http://www.economist.com/node/18988938. However, the empirical surveys are performed on firms between 1995-2002, that is before the advent of more recently successful technology giants such as Google and Facebook.

¹¹⁹ Waters, supra note 117.

¹²⁰ Joel Seligman, Equal Protection in Shareholder Voting Rights: The One Common Share, One Vote Controversy, 54 GEO. WASH. L. REV. 687, 689-90 (1986); Jeffrey N. Gordon, Ties That Bond: Dual-class Common Stock and the Problem of Shareholder Choice, 76 CAL. L. REV. 1, 9 (1988).

L. REV. 1, 9 (1988).

121 See Alison Smith, Paul J. Davies & Stephen Foley, Exchanges divided by dual-class shares, FINANCIAL TIMES (Oct. 3, 2013), https://www.ft.com/content/e18a6138-2b49-11e3-a1b7-00144feab7de.

¹²²Under the requirement imposed on listed companies to maintain a Code of Business Conduct and Ethics, section. *See Section 303A.10 Code of Business Conduct and Ethics*, NEW YORK STOCK EXCHANGE (Nov. 25, 2009),

 $http://wallstreet.cch.com/LCMTools/PlatformViewer.asp?selectednode=chp_1_4_3_8\&manual=\%2Flcm\%2Fsections\%2Flcm-sections\%2F.$

¹²³ See id. at Section 309.00 Purchases of Company Stock by Directors and Officers.

¹²⁴ See id. at Section 312.03 Shareholder Approval.

¹²⁵ See id. at Section 314.00 Related Party Transactions.

corporate resistance towards increasing shareholder rights, ¹²⁶ it is perhaps not surprising that the NYSE Listing Rules do not feature many specific shareholder protections, particularly in relation to companies with a dual-class voting structure. That said, empirical research ¹²⁷ in the US shows that many companies featuring dual-class voting structures have voluntarily put in place mechanisms such as increased independent board representation to assuage minority concerns. The National Association of Securities Dealers Automated Quotationsmarket (NasDaq) NASD and American Stock Exchange (now known as 'NYSE American' or AMEX), both of which allowed dual-class voting structures, also subject such companies to certain corporate governance safeguards. ¹²⁸

Where the London Stock Exchange is concerned, special listing rules apply to companies which feature a controlling shareholder in terms of voting rights. Such a controlling shareholder is required to enter into a relationship agreement with the company to preserve the company's business independence. An independent director on the board may determine if this is breached and call for all related-party transactions to be subject to minority shareholders' veto. In practice this power is rarely used so there is a lack of further dispute resolution between independent directors and their companies if this power is exercised. Minority shareholders are also allowed to vote as a separate class on all appointments of independent directors and if a change in listing status is proposed.

The measures above seem to reflect the compromises struck by listing authorities in adhering to minority shareholders' preference for agency-based standards of corporate governance as well as accommodating the needs of companies that perceive key shareholders as important resources for the company's continued innovative success. This area is by

¹²⁶ In particular, the Business Roundtable's aggressive lobbying efforts on behalf of the management sector and its successes in court in invalidating pro-shareholder rules enacted by the SEC. See Letter to SEC on Rule for Shareholder Proposal Resubmissions, BUSINESS ROUNDTABLE (Apr. 14, 2015), http://businessroundtable.org/resources/letter-sec-rule-shareholder-proposal-resubmissions.

¹²⁷R. Charles Moyer, Ramesh Rao, & Phillip M. Sisneros, Substitutes for Voting Rights Evidence from Dual Ciass Recapitalizations, FIN. MGMT. 35, 37 (1992).

¹²⁸ NASD required that the listed company appoint at least two independent directors and that an independent audit committee had to be formed. AMEX required that shareholders be allowed to appoint at least two directors to the Board within 2 years of the dual-class listing. See NASD and NYSE Rulemaking: Relating to Corporate Governance, U.S. SEC. AND EXCHANGE COMM'N (Nov. 4, 2003), https://www.sec.gov/rules/sro/34-48745.htm.

¹²⁹ See Rule 6.1A, FINANCIAL CONDUCT AUTHORITY (Jan. 1, 2018), https://www.handbook.fca.org.uk/handbook/LR/.

¹³⁰ See, e.g., Barker et al., supra note 111, at 106; Bobby V. Reddy, The Fat Controller - Slimming Down the Excesses of Controlling Shareholders in UK Listed Companies, 12 (U. Cambridge, Legal Studies Research Paper Series No. 47/2017, Oct. 2017), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3056999.

no means settled¹³¹ and continues to draw out the tensions between the resource-based and agency-based theories of corporate governance.

Distrust of significant control is pitted against the advantages of keeping founder-controllers incentivised. Choi argues that the disadvantages of agency, i.e., extraction of private benefits by controllers, are outweighed by the advantages of long-term corporate success. This is supported by other recent empirical research. Dallas and Barry find that where companies implement time-phased voting, a milder form of dual-class structure which rewards longer term shareholders with more voting rights, such firms have not only outperformed financially in the long-term but have also diversified their shareholder base, ensuring that there is little risk of entrenchment of insiders. However, opposing empirical research indicates that dual-class voting structures can reduce trust in companies and may be avoided by some investors. Gompers et al also find that listed companies with dual-class structures have by and large performed worse over the long term than those without a controlling shareholder.

Next, insulation from takeover threats, or takeover protection, may be useful in fostering innovation in companies. A number of commentators have found that innovation can be better nurtured in an environment not subject to the disruptions of takeover threats, suggesting that anti-takeover regimes may be regarded as a pro-innovation factor. However, anti-takeover provisions are contrary to the agency-based perspective of 'good corporate governance'. This is because under the agency-based perspective, managers should be disciplined by a functioning market for corporate

¹³¹ Marissa Lee & Wong Wei Han, *HKEX Mulls Over Dual-Class Shares Again*, THE STRAITS TIMES (Jan. 20, 2017, 5:00 AM), http://www.straitstimes.com/business/hkex-mulls-over-plan-for-dual-class-shares-again.

¹³² Albert H. Choi, *Concentrated Ownership and Long-Term Shareholder Value*, HARV. BUS. L. REV. (forthcoming 2017) (manuscript at 16-17), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2619462.

¹³³ Stephan Nüesch, *Dual-Class Shares, External Financing Needs, and Firm Performance*, 20 J. MGMT. & GOVERNANCE 525, 527 (2016) (arguing that dual-class structured firms perform better financially if equity financing is also sought on open markets, as the inherent concerns with agency problems will moderate the expropriation risks of dual-class voting structures).

¹³⁴Lynne L. Dallas & Jordan M. Barry, Long-Term Shareholders and Time-Phased Voting, 40 DeL. J. CORP. L. 541, 645 (2016).

¹³⁵ Vijay M. Jog & Allan L Riding, *Price Effects of Dual-Class Shares*, 42 FIN. ANALYSTS J. 58, 65 (1986).

¹³⁶Gompers, supra note 118, at 1084; The Cost of Control, supra note 118.

¹³⁷ Baranchuk, supra note 101, at 1; Miroslava Stráska & Gregory Waller, Do Antitakeover Provisions Harm Shareholders? 16 J. CORP. FIN. 487, 497 (2010); Haresh Sapra et al., Corporate Governance and Innovation: Theory and Evidence, 49 J. FIN. & QUANTITATIVE ANALYSIS 957, 957 (2014); John R. Becker-Blease, Governance and Innovation, 17 J. CORP. FIN. 947, 957 (2011). See also Mehmet Ugur & Nawar Hashem, Market Concentration, Corporate Governance and Innovation: Partial and Combined Effects in US-Listed Firms, 1 J. GOVERNANCE & REG. 199, 199 (2012) (reporting that takeover protection can incentivise increased R&D spend but may not correlate with more valuable brands or patents).

control. L'Huillery finds a positive correlation between less anti-takeover provisions and the promotion of innovation in French companies, but is of the view that one should not regard shareholder-friendly rules as unequivocally pro-innovation. 138 His research is highly context-specific and shareholder-friendly rules could be regarded as much-needed relief from prevailing protectionist corporate governance practices in the French corporate sector. Such mixed results perhaps suggest that some extent of takeover protection may benefit companies in highly open markets for corporate control, such as the UK, where the dominance of the agencybased corporate governance model has already produced concerns with regard to short-termism in the listed corporate sector. 139 Executives could be dis-incentivised from committing to long-term investments in R&D or taking risks in pro-innovation strategies. Nevertheless, the UK has maintained a top 5 position in the Global Innovation Index for the last 5 years even though the issues of short-termism have been identified in relation to its corporate sector. 140

C. Stakeholders and Social Capital as Resources

Next, empirical research has also found that corporate innovation can be promoted if a company engages more intensely with stakeholders and gathers useful knowledge, ideas and feedback for its strategic development in innovation. He Greater employee participation such as in the German co-determination system of corporate governance and a flatter working structure also facilitate corporate innovation as human capital in the company is made more engaged with corporate purposes and success, and therefore becomes more committed and productive. These findings have implications for the shareholder-centered agency-based model of corporate governance, as promoting innovation may require the elevation of stakeholders in relation to representation and participation in corporate governance.

The resource-based theory of the firm focuses on different locations of innovative potential in resources in order to mobilise and galvanise them towards the collective enterprise of the firm. Thus, it is not necessarily supportive of shareholder primacy. Indeed, it can be argued that the resource-based theory of the firm resonates with alternative theories of

¹³⁸Lhuillery, *supra* note 71, at 12.

¹³⁹BIS, *supra* note 66, at 9.

¹⁴⁰ Indicator Rankings & Analysis, GLOBAL INNOVATION INDEX,

 $https://www.globalinnovation index.org/analysis-indicator\ (last\ visited\ Feb.\ 16,\ 2018).$

¹⁴¹ Silvia Ayuso et al., *Using Stakeholder Dialogue as a Source for New Ideas: A Dynamic Capability Underlying Sustainable Innovation*, 6 CORP. GOVERNANCE 475, 475, 486 (2006); Vermeulen, *supra* note 74, at 30-31.

¹⁴²Belloc, supra note 4, at 852.

¹⁴³ Vermeulen et al., *supra* note 74, at 39.

corporate governance such as director primacy, director stewardship, stakeholder theory and social theories of the company.

The resource-based theory of the firm finds resonance with the perspective that the company is a 'team' of corporate constituents¹⁴⁴ that contributes inputs into the collective enterprise of the company. As such, directors' roles are to organise the mobilisation and deployment of such inputs in a coherent manner, and the exercise of their powers is for such purpose and not necessarily focused only on shareholder wealth maximisation or accountability to shareholders. 145 Further this director primacy theory accords well with the 'stewardship' perspective of directors' roles, 146 which offers a view of directors as stewards of corporate resources for the success of the collective enterprise of the company. Directors should not merely be seen as self-interested 'agents' who chiefly serve their own purposes under the agency-based perspective. To an extent, this theory accords with the position in both US and UK corporate law as directors owe their duties to the company as a distinct legal personality from shareholders or groups of shareholders. 147 However, as the company is a legal fiction, even UK law accepts that the corporate objective is the 'hypothetical' collective bargain of shareholders as a whole- which is understood as wealth creation in shareholders' interests over the long term. 148 Keay has since argued for the corporate objective to be understood as distinct and separate from shareholders' interests, and his view of long-term corporate survival and success is capable of forming the practical basis for directors' powers and duties under company law. 149

Further, stakeholders are important locations of resource for innovation, a model of corporate governance that incorporates stakeholder theory could be highly beneficial to the company. ¹⁵⁰ Stakeholder connections with firms could be intangible assets that firms can exploit for their competitive advantage, ¹⁵¹ such as employees ¹⁵² and human capital

¹⁴⁴Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247, 315 (1999); Kaufman, *supra* note 11, at 12.

¹⁴⁵ This model is also known as the director primacy theory. Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 Nw. U. L. Rev. 547, 605 (2002).

¹⁴⁶ James H. Davis et al., *The Distinctiveness of Agency Theory and Stewardship Theory*, 22 ACAD. MGMT. REV. 611, 612 (1997); Catherine M. Daily et al., *Corporate Governance: Decades of Dialogue and Data*, 28 ACAD. MGMT. REV. 371, 372 (2003).

¹⁴⁷Companies Act 2006, c. 46, § 170 (UK); see also Aronson v. Lewis, 473 A.2d 805, 811 (Del. 1984).

¹⁴⁸Companies Act 2006, c. 46, § 172 (UK).

¹⁴⁹ ANDREW KEAY, THE CORPORATE OBJECTIVE 9, 11-12 (Edward Elgar 2010).

¹⁵⁰ Iris H-Y Chiu, *Operationalising a Stakeholder Conception in Company Law*, 10 L. & FIN. MKT. REV. 173, 175 (2016).

¹⁵¹ Arturo Capasso, *Stakeholder Theory and Corporate Governance: The Role of Intangible Assets* (Oct. 29, 2004), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=610661.

¹⁵²Frank Mueller, *Human Resources as Strategic Assets: An Evolutionary Resource-Based Theory*, 33 J. MGMT. STUD. 757, 776 (1996).

connected with the firm, as well as stakeholders such as users and customers that bring network effects and positive reputational effects to firms. For example, a company like Facebook builds its success upon the trust and proliferation of use among its user communities, and its user base is, therefore, a massive resource for the company's innovative developments. Amazon.com also relies on its customers to build up its increasingly trusted 'feedback' system that encourages network effects and builds up reputational reliability, further enhancing its core business in sales.

Extending the stakeholder mapping of companies would also allow us to consider more broadly 'social capital' or 'natural capital' as being locations of resources for firms to exploit in terms of innovation, and such a perspective may fundamentally change our view of what an appropriate corporate governance model for a firm should be. Hart¹⁵³ proposes that we should see natural resources and their sustainability as part of the resourcebased theory of the firm, so that firms treat not only the use or exploitation of natural resources as important to their enterprise, but the protection and sustainability of such resources and the avoidance of externalities (such as pollution) as the essential counterpart to their enterprise too. This is because protecting sustainability and avoiding externalities addresses not only longterm sourcing for firms, but also helps to preserve firm-community relations in a positive manner, in order to sustain the firm's legitimacy of its enterprise. 154 Further, Branco and Rodrigues support the view that a firm's social capital, i.e. its community relations, its influence, reputation and legitimacy are extremely important resources for the firm. 155 Thus, firms may find it essential to develop social responsibility in order to protect and preserve its 'social capital' resources. These aspects are relevant to firm innovation, as inspiration for innovation can be derived from social capital resources. Further, such resources may also be important in amplifying the positive effects of innovation in terms of 'spreading the word' or boosting the social and market appeal of firms' innovative products and processes.

If the resource-based view of the salience of stakeholders and social capital is mapped onto an optimal model of corporate governance, then each firm's model of corporate governance, depending on its resources needs, could be very different from that standardised under the shareholder-centred agency-based model. There may be a case for the relevant firm to accommodate stakeholders in representation or participation in corporate

¹⁵³ Stuart L Hart, A Natural Resource-Based View of the Firm, 20 ACADEMY OF MGMT REV. 986, 991 (1995).

¹⁵⁴ Referred in as the 'social licence' to operate. See Karin Buhmann, Public Regulators and CSR: The 'Social Licence to Operate' in Recent United Nations Instruments on Business and Human Rights and the Juridification of CSR, J. OF BUS. ETHICS, (forthcoming) at 1 (2016), available at http://ssrn.com/abstract=2705360.

¹⁵⁵Manuel Castelo Branco & Lúcia Lima Rodrigues, Corporate Social Responsibility and Resource-Based Perspectives, 69 J. OF BUS. ETHICS 111, 112, 118 (2006).

governance¹⁵⁶ or even consider embracing elements of social and public accountability. 157 This would give rise to questions of new matrices of power allocations among shareholders, stakeholders and boards. 158 Chiu 159 argues that in attempting to actualise or operationalise a stakeholder theory of corporate governance in company law, heavy lifting is required as power is required to be distributed away from shareholders under the shareholdercentred agency based model, in favour of stakeholders in an organised and coherent manner. Further, directors' powers to undertake such coordination and organisation need to be enhanced. These implications would likely create much resistance in the current institutional shareholder community which largely supports the prevailing shareholder-centred agency-based corporate governance standards.

D. Structures for Governing Innovation in Companies

Deschamps and Nelson in their book 160 discuss the importance of having a governance structure in firms for innovation. This ensures that personal leadership and responsibility is being taken for stimulating, overseeing and implementing innovation. The CEO is often seen as a strategic lead for innovation¹⁶¹ and indeed in many innovative technology companies, the combination of CEO and founder-controller as strategic innovation lead has proved to be very effective. 162 Firms can innovate effectively even with different types of structures in place for governing

¹⁵⁶Donna Wood, Corporate Responsibility and Stakeholder Theory: Challenging the Neoclassical Paradigm, in 18 Bus, Ethics Ouarterly 159, 160-61 (Cambridge Univ. Press 2008); Tom Donaldson, Two Stories in 18 BUS. ETHICS QUARTERLY 159, 174-75 (Cambridge Univ. Press 2008); Andrew Crane & Trish Ruebottom, Stakeholder Theory and Social Identity: Rethinking Stakeholder Identification, 102 J. of Bus. Ethics 77, 79 (2011); James A Steib, Assessing Freeman's Stakeholder Theory, 87 J. of Bus. Ethics 401, 405, 412 (2009).

¹⁵⁷See generally Carl Kaysen, The Corporation: How Much Power? What Scope?, in THE CORPORATION IN MODERN SOCIETY 85-105 (Edward S. Mason ed., Harvard University Press 1970); JOHN E. PARKINSON, CORPORATE POWER AND RESPONSIBILITY: ISSUES IN THE THEORY OF COMPANY LAW 23-26 (Clarendon Press 1993); Philip Blumberg, The Politicization of the Corporation, 26 BUSINESS LAWYER 1551, 1551, 1556 (1971); Lawrence E. Mitchell, Groundwork Of The Metaphysics Of Corporate Law, 50 WASH. & LEE L. REV. 1477, 1480-81, 85 (1993). Also see writings aimed at encouraging the corporation to take up responsible citizenship, LAWRENCE E. MITCHELL, PROGRESSIVE CORPORATE LAW, Preface (Westview Press 1995); SALLY WHEELER, CORPORATIONS AND THE THIRD WAY 147-59 (Hart Publishing 2002); Kent Greenfield, New Principles for Corporate Law, 1 HASTINGS BUS. L. J. 89, 96 (2005); KENT GREENFIELD, THE FAILURE OF CORPORATE LAW (Univ. of Chicago Press

¹⁵⁸ See Generally, Iris H-Y Chiu, Operationalising A Stakeholder Conception in Company Law, 10 L. & FIN. MKT. REV. 173 (2017).

 $^{^{160}\,\}mathrm{Jean}\text{-Philippe}$ Deschamps & Beebe Nelson, Innovation Governance: How TOP MANAGEMENT ORGANIZES AND MOBILIZES FOR INNOVATION 87-105 (John Wiley & Sons 2014). 161 *Id*.

 $^{^{162}\}mbox{For example},$ Jeff Bezos as the CEO, founder-controller and innovative lead of Amazon; Mark Zuckerberg as the equivalent in Facebook and Jack Ma having an equivalent position in Alibaba.

innovation, as long as there is a credible structure. In some firms a Chief Technical Officer¹⁶³ may be the strategic lead for corporate innovation, in others a steering group of executives or business leaders could take the lead.¹⁶⁴

The agency-based perspective of corporate governance emphasises governing structures that focus on monitoring boards, hence the development of audit committees on the board after corporate reporting scandals in the UK165 and US, 166 and the development of risk committees on the board after the global financial crisis 2007-2009. 167 As Lazonick and O'Sullivan¹⁶⁸ point out, there is no theory of innovation in this corporate governance model and no recommended structural standards for companies in promoting and governing innovation. Further, there may be tensions between pursuing innovation and instituting a corporate culture that meets the standards of the agency-based corporate governance model. Moore¹⁶⁹ points out that corporate governance standards are evolving towards a 'risk moderation' role for boards after the global financial crisis 2007-2009, in order to protect shareholder value from excessive risk-taking, and this may be antagonistic to developing pro-innovation and risk-taking leadership on boards. Mendoza et al¹⁷⁰ also point out that the procedural compliance required to maintain the corporate governance standards in the prevailing agency-based model fosters defensive and box-ticking behaviour on boards, and this may do little in stimulating innovative leadership. Perhaps this is why McCahery et al¹⁷¹ argue that innovative firms avoid being subject to securities markets pressures as conformity with agency-based corporate governance standards is often expected in securities markets.

Although we have presented both sides of the empirical research on what matters in corporate governance for firm innovation, we find that

 $^{^{163}\}mbox{May}$ be a senior appointment to develop research, innovation and development of new products.

¹⁶⁴DESCHAMPS & NELSON, *supra* note 160, at 87-105.

¹⁶⁵ After the fall of Polly Peck and BCCI in the early 1990s, the audit committee was a best practice in corporate governance recommended in the Cadbury Code of Corporate Governance 1992. *See* REPORT OF COMM. ON FIN. ASPECTS OF CORP. GOVERNANCE, 5.1, 5.3 (Cadbury ed., 1992).

¹⁶⁶This change was brought about by §301 of the Sarbanes-Oxley Act 2002 introduced after the fall of Enron in 2000, and implemented by national stock exchanges in their listing rules relating to corporate governance. Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, §301, 116 Stat. 745, 775-77 (2002).

¹⁶⁷ See, e.g. Council Directive, 2013/36, 2013 O.J. (L176) Art. 88(1)(a) (EL).

 $^{^{168}}$ William Lazonick & Mary O'Sullivan, Corporate Governance, Innovation and Economic Performance in the EU (CGEP Report 2004).

 ¹⁶⁹Marc T. Moore, The Evolving Contours of the Board's Risk Management Function in UK Corporate Governance, 10 J. OF CORP. L. STUD. 279, 281, 301 (2010).
 ¹⁷⁰Jose M. Mendoza, Christoph Van der Elst & Erik P.M. Vermeulen, Entrepreneurship

[&]quot;Jose M. Mendoza, Christoph Van der Elst & Erik P.M. Vermeulen, Entrepreneurship and Innovation: The Hidden Costs of Corporate Governance in Europe, Topics in Corporate Law and Economics (2010), available at http://ssrn.com/abstract=1698352.

¹⁷¹ Joseph A. McCahery & Erik P.M. Vermeulen, *Venture Capital, IPOs and Corporate Innovation, Topics in Corporate Law and Economics* (2014), *available at* http://ssrn.com/abstract=2298315.

(a) tensions remain between adhering to the prevailing agency-based corporate governance standards and the corporate governance needs of firms that facilitate innovation; but (b) the shareholder-centred agency based model of corporate governance is not irrelevant to and could contribute to an extent to firm innovation. We propose two sets of implications to be fleshed out in Section C. Section C proposes that prevailing corporate governance standards should be adjusted if such standards are adverse to the resources, structures or incentive designs that promote corporate innovation. Indeed, excessive prescriptions in corporate governance standards are probably sub-optimal for promoting innovation. However, securities markets do not seem to favour excessive levels of flexibility or open-endedness in corporate governance standards. In view of the need to create a balance between predictability and flexibility in investors' expectations of today's listed companies, Section C proposes a 'middle way' that preserves the prevailing standards of corporate governance but allows for coherently and justifiably developed exceptions that can be derived from the resource-based needs of firms in relation to innovation.

IV. ACCOMMODATING PRO-INNOVATION CORPORATE GOVERNANCE STANDARDS

The prevailing corporate governance standards in the UK ¹⁷² and in many leading jurisdictions are focused on addressing the agency problem in corporate governance: protecting shareholder value in the corporation, upholding minority shareholder rights, ensuring that boards monitor executives and that the board is itself monitored by independent directors. This model is characterised as a 'value protection' but not a 'value-creation' model in terms of corporate strategy. ¹⁷³ As discussed in Section B, excessive concern with 'value protection' based on assumptions about individualistic and opportunistic economic behaviour may result in a myopic neglect of the more 'optimistic' perspectives regarding human behaviour and motivations in advancing a collective endeavour and enterprise. Corporate governance standards should incorporate facilitative aspects towards the latter aspects, as ultimately, both 'value protection' and 'value creation' perspectives aim at the same ultimate objective of corporate success.

There is a case to consider adjusting prevailing corporate governance standards in order not to dis-incentivise innovation. In the

¹⁷²Financial Reporting Council, The UK Corporate Governance Code, 6-8 (Apr. 2016), available at https://www.frc.org.uk/Our-Work/Publications/Corporate-Governance/UK-Corporate-Governance-Code-April-2016.pdf.

¹⁷³ Roger M. Barker, RE-DESIGNING CORPORATE GOVERNANCE TO PROMOTE INNOVATION, GUBERNA 1, 11, 26 (2016), *available at* http://www.guberna.be/sites/default/files/pubs/Redesigning%20corporate%20governance%20%20-%20position%20paper%2020%201%202016.pdf.

alternative, we could consider establishing a different set of corporate governance standards (or an alternative Code) for innovative companies.

In the UK, corporate governance standards are largely maintained as 'soft law'. 174 Some securities markets such as the New York Stock Exchange ("NYSE") have made certain corporate governance requirements mandatory such as the composition of independent directors and the institution of the audit committee, but listed issuers on the London Stock Exchange only have to 'comply or explain' in relation to the UK Corporate Governance Code. This means companies can explain any deviations from the Code and it is up to their shareholders to determine if explanations for deviation are acceptable. Companies could adapt the Code to their unique needs and explain to investors if they deviate from the Code. It will then be up to investors to judge if such deviation is likely to secure value for the company or otherwise. The comply-or-explain approach also seems to be the prevailing approach for many jurisdictions and stock markets that have adopted a corporate governance code. 175 As corporate governance codes are 'soft law' in nature, there is inherent flexibility for companies to adapt the standards in the codes to their pro-innovation needs. Thus, it can be argued that the tensions between prevailing standards based on a shareholdercentred agency-based model and firm innovation needs should not be exaggerated as companies can make appropriate governance choices and explain to their shareholders.

However, in reality there is considerable market pressure for what Moore describes as the evolution of a 'comply-or-else' regime. ¹⁷⁶ This is largely because early implementation of comply-or-explain generated boilerplate and routine explanations that were opaque and not meaningful, making the 'explain' strategy discreditable. ¹⁷⁷ Subsequent efforts at enhancing explanations especially where companies desired a unique deviation, were not met with welcome in capital markets. ¹⁷⁸ Investors suffer from information asymmetry in determining if unique explanations are beneficial and tend to trust standardised practices that are in compliance. The role of proxy advisory agencies in standardising expectations of what is 'good' corporate governance is also of significant influence. ¹⁷⁹

¹⁷⁴ Some aspects are "legalised" such as the binding shareholder vote on executive remuneration under 439A, UK Companies Act 2006, but many matters such as Board composition or committees are left to the Code. *See* Companies Act 2006, c. 46, § 439A (UK).

¹⁷⁵ Klaus J. Hopt, Comparative Corporate Governance: The State of the Art and International Regulation, 59 AM. J. OF COMP. L. 1, at 11, 14-15 (2011).

Marc T. Moore, Whispering Sweet Nothings: The Limitations of Informal
 Conformance in UK Corporate Governance, 9 J. of CORP. L. STUD. 95, 128, 137 (2009).
 177 Iain MacNeil & Xiao Li, "Comply or Explain": Market discipline and Non-

Compliance with the Combined Code, 14 CORP. GOVERNANCE no.5, at 489-90 (2005).

 $^{^{178}\,\}mathrm{Such}$ as in the case of Marks & Spencer Plc discussed in Moore. Moore, supra note 176, at 111-12.

¹⁷⁹ Paul J. Rose, *The Corporate Governance Industry* 32 J. of CORP. L. 887, 891 (2007).

Explicit adjustments to established corporate governance codes such as the UK Corporate Governance Code would likely face many challenges, even if framed towards the purposes of promoting firm innovation. The UK Corporate Governance Code for example, is a product of influences increasingly dominated by the investment sector. ¹⁸⁰ This sector has every incentive to shape a shareholder-centred set of corporate governance standards that protect investment value and minority shareholder rights. Policy-makers also promote the importance of institutional investors as they desire the investment sector to facilitate market-based governance for the corporate sector and minimise the need for state intervention and regulation.¹⁸¹ In this light, Code standards that are consonant with shareholders' preferences are unlikely to be pared down. Further, corporate governance codes play a signalling role to investors, indicating that companies listed in the securities market are well-governed and promising. Their 'branding role' in boosting the appeal of securities markets¹⁸² to investors, especially institutional investors, is likely to be protected by securities markets and listing authorities. There is likely to be a degree of anxiety and reluctance to adjust code standards in a manner that is seen to deviate from the shareholder-centred agency-based model. Pressures from international convergence would also make such adjustments unlikely to be pursued. The adoption of similar corporate governance standards in many securities markets around the world has led to the general acceptance of corporate governance codes as being essential capital markets institutions. 183 Global competitive pressures tend towards sustaining or encouraging more convergence of corporate governance standards.

McCahery and Vermeulen posit that an alternative set of corporate governance standards could be established for innovative companies. ¹⁸⁴ Arguably, having a set of alternative corporate governance standards is superior to the situation of open-ended flexibility in deviation from prevailing standards. Recognition for *different* standards that may be useful for companies that engage in significant amounts of innovation, such as in technology, *and* formalisation into a different code give such *different* standards an appeal of legitimacy. This is important for companies in their interface with capital markets as the existence of governance standards

¹⁸⁰ Iris H-Y Chiu, *Learning from the UK in the Proposed Shareholders' Rights Directive* 2014? European Corporate Governance Regulation from a UK Perspective, 114 Zeitschrift für Vergleichende Rechtswissenschaft 1, 20 (2015).

¹⁸¹ See generally ROGER M. BARKER & IRIS H-Y CHIU, Investment Management and Corporate Governance in the Financial Economy (Edward Elgar, 2017).

¹⁸² Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shleifer, What Works in Securities Laws, 71 J. OF FIN. 1, 20 (2006).

¹⁸³ See G20/OECD Principles of Corporate Governance, OECD, 10 (2015), http://www.oecd-

ilibrary.org/docserver/download/2615021e.pdf?expires=1500891878&id=id&accname=guest&checksum=B25097F0D5E0194BFBD901ABB7BA7545.

¹⁸⁴ Joseph McCahery & Erik P. Vermeulen, Corporate Governance and Innovation Venture Capital, Joint Ventures, and Family Businesses (Eur. Corp. Governance Ins., Law Working Paper No. 65, 2006), available at http://ssrn.com/abstract=894785.

fosters investor trust. But, developing such a set of standards would also entail defining its scope of application, and justifying why carving out 'innovative companies' as a sector distinguished from the listed corporate sector is appropriate. Would technology, automotive or pharmaceutical companies be regarded as innovative while retail companies may not? Establishing an alternative code for a yet-to-be-defined alternative sector raises boundary issues, and also arbitrage issues, although it can be argued that competition between codes can lead to greater market choice in optimal governance models for listed companies.

For now we argue that an immediately practicable and incremental approach lies in adjusting prevailing corporate governance standards, in the manner of carving out a recognised exception to the standards on the ground of 'resource-based justifications'. This is a refinement of the 'comply-or-explain' model which suffers from the perception problem that 'comply' is ideal, while 'explain', which relates to an uncharted territory, raises investor risk. We are of the view that by formally carving out exceptions, such exceptions can be subject to general principles that reflect companies' resource-based needs that promote innovation. This provides more transparency and predictability for investors, enhancing the acceptability and legitimacy of the exceptions. The principles for the exceptions can be derived from common themes in empirical findings discussed above. We illustrate how such an 'exceptions' regime may work.

A. Establishing Principled Resource-based Exceptions

The key features of many corporate governance codes emphasise boards' roles in effective monitoring of executive directors and senior management, such as Chief Executive Officers, and the 'value protection' needs of shareholders. The excessive prioritisation of 'value protection' priorities may cause boards to make strategic trade-offs between value protection priorities and 'value creation' strategies. We propose some exceptions to the conventional corporate governance standards in order to accommodate pro-innovation needs that would benefit from a resource-based perspective. These adjustments relate to board appointments, design of executive remuneration and board responsibilities.

B. Balancing 'Monitoring' Appointments with 'Resource-based' Appointments

Under the shareholder-centred agency-based model of corporate governance, non-executive directors are to be appointed to the board to serve primarily in the capacity of 'financial monitor'. ¹⁸⁵ They are responsible for scrutinising financial performance, the 'integrity of financial

¹⁸⁵ UK Corp. Governance Code § A.4 (2016).

information and that financial controls and systems of risk management'. 186 Such responsibilities are clearly in the vein of chiefly 'defensive' or 'value protecting' purposes.

In order to boost 'monitoring' power on boards, the composition of non-executive or independent directors is prescribed. ¹⁸⁷ The UK Corporate Governance Code recommends half of the board to be non-executive and independent. ¹⁸⁸ Independence requirements are also applied for the membership of the nomination committee and the majority of membership of the remuneration or audit committees of the board. ¹⁸⁹ These profile requirements pertain to non-executive directors' 'monitoring' role especially in relation to the work of the independent committees of the board in relation to remuneration design, audit and risk management. ¹⁹⁰ Further, the UK Corporate Governance also designates the senior independent director to be the 'monitoring' lead and to interact with shareholders. ¹⁹¹

The prescriptive composition requirements should be subject to exceptions where resource-based justifications exist. Perhaps an exception can be created to moderate the requirement of 50% independence to 'at least 25%,' so that room can be made for resource-based appointments that can be explained. Section B has pointed out how boards are an important resource, and at times, higher levels of executive appointments or even certain interlocking directorial appointments could be important resources for the firm.

Next, we suggest that it would be a missed opportunity for appointments of non-executive directors to only focus on their financial monitoring roles, as empirical research has found that non-executive directors, especially those with 'social capital', can bring new ideas and strategic input ¹⁹² that is useful for the company's promotion of innovation. ¹⁹³ Further, with the role of the senior independent director being defined to align with the company's accountability to shareholders, perhaps the role of 'non-executive' director should be left more open and welcome to a resource-based perspective of their relevance. The UK Corporate Governance Code sets out that appointments to the board are to be evaluated in terms of the balance of skills, knowledge, independence and

¹⁸⁶UK Corp. Governance Code § A.4 (2016).

¹⁸⁷ *Id*. § B.Î

¹⁸⁸ *Id.* § B.1.2.

¹⁸⁹ *Id.* §§ B.2.1, C.3.1 & D.2.1.

¹⁹⁰ UK Corp. Governance Code § B.2, C & D (2016).

¹⁹¹ Id. § A.4.1.

¹⁹² Strategic contribution by non-executive directors was highlighted in Derek Higgs, *Review on the Role and Effectiveness of Non-executive Directors* (Jan. 2003), but over the years and across corporate scandals, the 'monitoring' role of non-executive and independent directors has become more pronounced.

¹⁹³ Supra note 81-82.

experience. 194 We urge that appointments to the board, whether executive or non-executive, should take into account of the resource-based profile of the candidate, and that board responsibilities be defined more holistically, including the needs of advancing the collective enterprise of the company, besides 'value protection' responsibilities. This would mean explicitly widening the scope of non-executive and independent director's scope of oversight, and requires adjustment on the part of the nomination committee's selection processes.

Under the UK Code, the nomination committee is tasked with selecting suitable executive and non-executive directors. ¹⁹⁵ Empirical research shows that the characteristics of the nomination committee members affect their selection. ¹⁹⁶ As the committee has three members and a majority are to be independent and non-executive, ¹⁹⁷ in selecting non-executive directors, the committee is likely to apply criteria that are most pertinent to candidates' 'monitoring' qualities, and may play down the importance of strategic capabilities. ¹⁹⁸ We urge a more broad-minded application of appointment criteria to non-executive and independent directors, looking conjunctively at their strategic abilities and the 'resources' they can contribute to the company. The nomination committee should be required to report on both the agency-based as well as resource-based justifications for board appointments in the company's annual report.

One of the implications of widening the scope of non-executive or independent directors' responsibilities is that perhaps such directors could be awarded performance-linked remuneration in order to incentivise them to bring their 'resources' to contribute to the strategic needs of the company. At present under the UK Code, non-executive directors are tied to a monitoring role and cannot be remunerated in a manner linked to the company's performance. 199 The Code is antagonistic to this suggestion as such remuneration is perceived to likely jeopardise non-executive directors' independence or objectivity. If there are persons interested enough in contributing to the strategy of the company's business in this manner, they should not be put up for non-executive appointments in the first place. Being an executive director is demanding, and suitable or talented people may not wish to make that commitment if tied up elsewhere. It can be useful to have a non-executive director on board who needs to be appointed in that capacity only perhaps because s/he holds an executive directorship elsewhere. If we take a resource-based perspective of corporate governance, there is no reason why non-executive directors who contribute to the

¹⁹⁶ Szymon Kaczmarek, Satomi Kimino & Annie Pye, Antecedents of Board Composition: The Role of Nomination Committees, 20 CORP. GOVERNANCE, no. 5, 2012, at 483.

¹⁹⁴UK Corp. Governance Code § B.6 (2016).

¹⁹⁵ *Id*. § B.2.1.

 $^{^{\}rm 197}\, UK$ Corp. Governance Code \S B.2.1 (2016).

¹⁹⁸ Kaczmarek, Kimino & Pye, *supra* note 196, at 476.

¹⁹⁹ UK Corp. Governance Code § D.1.3 (2016).

company's success should not be rewarded in a form of performance-linked remuneration. We see such an exception to the Code's standards as being consistent with the appointment of non-executive directors based on resource-based justifications.

C. A Different Look at Board Diversity

Board appointments are now affected by policy initiatives that seek to encourage greater diversity, especially gender diversity. ²⁰¹ Although appointments are made on a merit basis, there is a need to ensure that there is adequate diversity to meet the requirements of 'balance'. The debate on gender diversity that exploded after the global financial crisis 2007-2009 focused on the likelihood of women's risk moderation role on boards, seen as essential to curb excessive risk-taking in business strategy. 202 The impetus behind this initiative, and other forms of diversity are likely to be more socially-motivated as empirical findings on the performance relation to diverse Boards are mixed. 203 One could view gender diversity as bringing about a change in dynamics that could benefit the Board's decision-making process.²⁰⁴ Such arguments are also causally flimsy and could be based on stereotyping the qualities women bring to boards. 205 The call for more diversity on boards is curiously not connected to a more resource-based rhetoric. Indeed such a view may make diversity arguments (and not just gender diversity) more legitimate and convincing, especially since empirical research supports the link between diversity on boards, the promotion of new strategic thinking and increased corporate innovation.²⁰⁶ It is also opined that from a resource-based perspective, diversity on boards also

²⁰⁰Barker, supra note 181, at 24.

²⁰¹ For example, see wide movement in Europe, European Women on Boards, *Gender Diversity on European Boards* 11 (Apr. 2016), *available at* http://european.ewobnetwork.eu/wp-content/uploads/2016/04/EWoB-quant-report-WEB-spreads.pdf.

²⁰² Melsa Ararat, Mine H. Aksu & Ayse Tansel Cetin, *The Impact of Board Diversity on Boards' Monitoring Intensity and Firm Performance: Evidence from the Istanbul Stock Exchange* 17 (Apr. 2010), available at

http://papers.ssm.com/sol3/papers.cfm?abstract_id=1572283; Mohamed A. Gulamhussen & Silvia F. Santa, *Women in Bank Boardrooms and Their Influence on Performance and Risk-Taking* (Apr. 2010) (unpublished manuscript) at 6-7, *available at*

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1615663 (arguing that gender diversity on bank Boards improves risk moderation).

²⁰³ Renee B. Adams & Daniel Ferreira, Women in the Boardroom and Their Impact on Governance and Performance, (October 22, 2008) (unpublished manuscript) at 18, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1107721; Deborah Rhode & Amanda K. Packel, Diversity on Corporate Boards: How Much Difference Does Difference Make?, 39 DEL. J. CORP. L. 377, 397 (2010); but cf. Jie Chen, Woon Sau Leung & Kevin P. Evans, Board Gender Diversity, Innovation and Firm Performance 28-29 (Nov. 30, 2015) (unpublished manuscript), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2607295 (Suggesting that gender diversity on a board creates more innovation).

²⁰⁴ Barnali Choudhury, New Rationales for Women on Boards 34 OXFORD J.L. STUD. 511, 512 (2014).

²⁰⁵ Adams & Ferreira, *supra* note 203, at 28.

²⁰⁶Chen, Leung & Evans, *supra* note 203, at 30.

improves social and stakeholder legitimacy, as well as engagement, if these are important to the company's needs. ²⁰⁷

D. A Strategy and Innovation Committee of the Board

The functions of the board, especially in relation to its dedicated committees, are may not susceptible to the promotion of corporate innovation for long-term development and success. This is because important committees such as the audit committee and remuneration committee are focused on 'value protection' in respect of their roles. The audit committee has oversight of the integrity of financial reporting, the role of internal control and the appointment or removal of external auditors, while the remuneration committee is to ensure appropriate executive remuneration design that promotes pay-for-performance and no rewards for failure. Performance and more more appropriate and too focused on compliance and monitoring issues today instead of providing strategic leadership, which is a resource-loss for companies.

Boards may consider establishing a Strategy and Innovation Committee in order to provide balance vis a vis the other board responsibilities and committees. Such a Committee could then be responsible for instituting a corporate-wide innovation strategy and its oversight. Such a Committee does not replace the board in strategic contributions as every director can bring a 'resource-based' contribution to the Board. Many boards are not inordinately large, 211 and the Committee's role could be to coordinate the 'resource' profiles of all board members, 212 while some focus on 'monitoring' type functions in relation to the audit or remuneration committees. Such a Committee would be different in composition from the Committees dedicated to value-protection, and could indeed comprise of a balanced slate of executive and non-executive directors committed to exploring the exploitation of innovation by the company. The Committee can also be positioned to develop an enterprisewide strategy and investigate all levels of the firm in order to encourage and motivate innovation. Articulating the separate importance of 'strategy and

²¹⁰Erik Vermeulen, Mark Fenwick & Masato Hisatake, *Intelligent Cars Inc. - Governance Principles to Build a Disruptive Company*, 34 (Tilburg Univ. Lex Res. Topics in Corp. L. & Econ., Working Paper No. 2016-6).

²⁰⁷Mijntje Lückerath-Rovers, *Female Directors on Corporate Boards Provide Legitimacy to a Company: A Resource Dependency Perspective*, MGMT. ONLINE REV. 9 (June 2009), *available at* www.mluckerath.nl/uploads/ManagementOnlineReview.Juni.2009.pdf.

²⁰⁸ We see their role as focused on 'value protection' as they are intended to monitor against management misconduct such as in relation to financial reporting or inflating management pay. This is further discussed below.

²⁰⁹ UK Corp. Governance Code §§ C, D (2016).

²¹¹ See Paul M. Guest, *The Impact of Board Size on Firm Performance: Evidence from the UK*, 15 Eur. J. Fin. 385 (June 2009) (suggesting large boards may function less well in decision-making and affect firm performance).

²¹² Allen Kaufman & Ernie Englander, *A Team Production Model of Corporate Governance*, 19 ACAD. MGMT. EXEC. 9, 13 (Aug. 2005).

innovation' which some may take for granted as an inherent board task, can contribute towards reinstating the importance of 'entrepreneurial' leadership on the board, a task which Vermeulen et al critically opine has been left by the wayside in many companies. ²¹³

The Strategy and Innovation Committee could be responsible for developing stakeholder engagement and channels for representation or participation if this is warranted from a resource-based perspective. Where the network effects of stakeholders, reputational maintenance or matters of feedback by stakeholders are important to the company as 'resources', as discussed in Section B, the Committee could develop strategies for stakeholder engagement that may create new avenues of participation and/or accountability.

The incremental suggestions above add formalised and resourcebased exceptions and features to existing corporate governance standards. They are not uncontroversial as investors can perceive a moderation of 'monitoring' emphases to be detrimental to their interests, or stakeholder engagement to be a dilution of shareholder primacy. This article does not set out to present a perfect reconciliation, as Sections A and B have already explored the context of tensions and dilemmas between the shareholdercentred agency-based corporate governance standards favoured by investors and deviations from those standards for pro-innovation needs in companies. We believe that the proposed adjustments are ultimately moderations of existing standards that seek to mitigate the straitjacketing effects of prevailing corporate governance standards perceived by some companies in accessing or deploying resources to develop innovation. Prevailing corporate governance standards have developed such a strong leaning towards investor interests that some balance towards the other constituents in corporate governance may not be unwarranted.

E. Rethinking Corporate Governance Standardisation

In light of our approach of establishing principled exceptions to prevailing corporate governance standards, it is also worth taking a step back and critically questioning whether the movement of corporate governance standardisation in securities markets is optimal.

Standardisation in Corporate Governance Codes tends towards inflexibility over the long term.²¹⁴ This may also apply to a regime of principled-exceptions to Code standards. In the contests between flexibility and predictability, between business and investors, compromises could be made in the development of Code standards as well as principles of

²¹³ Vermeulen, *supra* note 210, at 28-29.

²¹⁴Corporate Governance Codes tend to grow in volume and detail and ultimately minimise the original flexibility it was intended to provide. *See generally* UK Corp. Code, *supra* note 209.

exceptions, resulting in the proliferation of 'generally-accepted' positions that become inflexible and quasi-mandatory.

The factors that stimulate innovation discussed above: access to a range of resources, designing incentives for innovation to occur at all levels in a firm, and having a range of structures that would support innovation; are open-ended in nature and would likely benefit from less straitjacketing standards. Yablon warns that the innovation mindset and ethos seek to explore the 'weird and wonderful' rather than the conventional. ²¹⁵ Thus, it could be optimal for companies to be subject only to minimal governance practices so that their resource-based opportunities are not constrained. Excessive standardisation in corporate governance that is purported towards promoting innovation may ultimately achieve the antithesis of what is desired.

However, scaling back the development of corporate governance standards or codes is unlikely given the developments since the 1990s. The UK Corporate Governance Code has grown in volume and detail over each review, and some corporate governance practices have hardened into binding obligations. Since the establishment of the Cadbury Code of Corporate Governance in 1992, the Code has incorporated concerns of executive remuneration in 1995, ²¹⁶ consolidated requirements of directorial independence after the Higgs Review of 2003, ²¹⁷ and strengthened the board's monitoring role of executives, as well as shareholders' monitoring of boards since the Walker Review after the global financial crisis 2007-2009. ²¹⁸ Binding obligations include the shareholder's advisory vote for executive remuneration packages introduced in 2002²¹⁹ now hardened into a 3-yearly binding vote. ²²⁰ In the US, corporate governance issues have also become increasingly addressed in securities regulation, from the mandatory

²¹⁵ Yablon, supra note 5, at 1040.

²¹⁶ Directors' Remuneration: Report of a Study Group chaired by Sir Richard Greenbury (Jul. 17, 1995). In 1995 the governance issue in the spotlight was executive remuneration, as public outcry mounted against excessive executive remuneration in privatised utilities companies, while staff reductions and pay restraint for staff took place in such companies. The Committee led by Sir Richard Greenbury to look into this issue produced a Report which recommended more robust guidelines for the structure and operation of independent remuneration committees on the Board, and also advocated greater shareholder engagement with remuneration issues. The Code was modestly amended in that light. See Ian W. Jones & Michael G. Pollitt, Who Influences Debates in Business Ethics? An Investigation into the Development of Corporate Governance in the UK Since 1990, 20 (ESRC Ctr. Bus. Res., Working Paper No. 221).

²¹⁷ See generally Higgs, supra note 192.

²¹⁸ The global financial crisis triggered important reviews such as the Walker Review of Corporate Governance in Banks and Financial Institutions which fed into Code amendments in relation to directorial time commitment, the importance of the Chairman and the monitoring role of independent directors, and the importance of risk management oversight at Board level. Marc T. Moore, *The Evolving Contours of the Board's Risk Management Function in UK Corporate Governance* 10 J. CORP. L. STUD. 279, 279 (2010).

²¹⁹ UK Directors' Remuneration Report Regulations 2002, *Members Approval of Directors' Remuneration Report* 7 (Ser. No. 1986).

²²⁰Companies Act 2006, § 439A (UK).

requirements of internal control and audit committees in the Sarbanes-Oxley Act 2002²²¹ to the post-crisis Dodd-Frank Act 2010 which provides for the mandatory shareholder vote on executive remuneration.²²²

In this context, we see the moderation of the compliance environment for corporate governance, and not a major overhaul or abolition, as the only possible and incremental step that addresses companies' pro-innovation needs. The freedoms that companies need to exploit innovative potential in their resources ultimately have to be balanced against the need for investor scrutiny and accountability. The development of 'principles of exceptions' to prevailing standards allows the resource-based theory of corporate governance to gain traction, by compelling companies to articulate and explain how the exceptions allow them to leverage upon their resources and meet innovation needs. 223 This regime is less likely to undermine the established sense of trust that investors have in shareholder-centred agency-based corporate governance standards but goes one step further. The creation of resource-based exceptions to corporate governance compliance encourages investors to actively engage with corporate governance practices and their connection with corporate success. Investors should not just passively expect corporate compliance with prevailing standards. We see this proposal as being consistent with the 'stewardship' development in shareholder engagement with companies.

The UK has pioneered a Stewardship Code since 2010,²²⁴ in order to encourage investors to engage more deeply but constructively with their investee companies, so that their financial monitoring role can also bring about wider social benefits in terms of their sectorial monitoring. Although 'stewardship' empowers and legitimises investors to engage with companies more intensely beyond the formal mechanisms in company law, such as at general meetings, it also requires investors to make adequate disclosure of their engagement and voting policies and demonstrate that their stewardship is for the overall benefit for the company as a whole.²²⁵ As the investment sector is more prepared to dialogue with companies on their corporate governance in the 'stewardship' era, ²²⁶ proposed that our

²²¹ See Sarbanes-Oxley Act, §§ 301-302 (2002). But see, Roberta Romano, The Sarbanes-Oxley Act and the Making of Quack Corporate Governance 114 YALE L. J. 1521, 1526-27 (2005).

²²²Dodd-Frank Act § 951, 12 U.S.C. § 5301 (2012).

²²³ This is how we see the 'exceptions-based' regime would work.

²²⁴ FIN. REPORTING COUNCIL, *The UK Stewardship Code* 1 (Sept. 2012), *available at* https://www.frc.org.uk/getattachment/d67933f9-ca38-4233-b603-3d24b2f62c5f/UK-Stewardship-Code-(September-2012).pdf.

²²⁵ Id., at 6-9. (Principles 1, 2, 6 and 7 require companies to make disclosure of engagement, voting and conflicts of management policies. Principles 3, 4 and 5 set out the situations for optimal forms of shareholder engagement, from informal engagement to 'escalation' and collective engagement.)

²²⁶ See generally Alasdair Wood, U.K. Say-on-Pay update; Another Shareholder Spring, Willis Towers Watson (Aug. 2, 2016).

approach of developing principles of exceptions for companies to meet their resource-based objectives in promoting innovation is timely for a maturing investment sector. Such a regime supports engaged capital markets where healthy levels of disclosure are compelled and supported by adequate levels of investor dialogue and engagement.²²⁷

V. CONCLUSION

A company's pro-innovation needs are often met by the exploitation of its resources, widely defined. The resource-based theory of the firm provides immense empirical insights into how a firm's corporate governance factors can contribute to promoting innovation. These implications may however conflict with the prevailing standards of corporate governance imposed on many securities markets for listed companies, which have developed based on theoretical models supporting a shareholder-centred and agency-based theory of the firm. Although prevailing corporate governance standards can to an extent support firm innovation, tensions are created in some circumstances where companies pit their corporate governance compliance against resource-based needs that promote innovation. Such tensions have arisen in controversies surrounding listed companies that issue dual class stock that protect founder-members' innovative visions for the company, or in companies with influential controlling shareholders, or where stakeholders may be important for corporate success. We argue that what is at the heart of many of these controversies is a contest between a resource-based perspective of the firm that seeks to maximise innovation and enterprise opportunities as a collective endeavour, and the agency-based perspective of the firm that seeks to mitigate the power of influential constituents such as directors or controlling shareholders in order to protect minority investors.

In the present context of steady internationalisation and convergence in corporate governance standards in global securities markets towards a shareholder-centred agency-based model, we argue that there is a need to provide some room for accommodating the resource-based needs for companies in relation to promoting innovation. These needs may require deviation from prevailing corporate governance standards, and we propose a structured, coherent and formalised regime for such exceptions to occur in a way that would be subject to adequate investor scrutiny and market governance. This incremental approach is likely to be more acceptable and constructive in today's securities markets and is able to advance the

²²⁷ Not all signatories to the Stewardship Code demonstrate an optimal level of engagement and the Financial Reporting Council, gatekeeper of the Code has introduced a system of 'tiers' to differentiate investors demonstrating higher or lower levels of 'stewardship'. Investors are being empowered as more and more disclosure obligations are placed on companies. Iris H-Y Chiu, *Internatoinal Shareholders as Stewards: Towards a New Conceptualisation of Corporate Governance*, 6 BROOK. J. CORP. FIN. & COM. L. 387, 405 (2012).

importance of the resource-based theory of the firm that promotes long-term success of the corporate sector.

AT THE JUNCTION OF INTERNATIONAL ADMINISTRATIVE LAW, INTERNATIONAL COMMERCIAL LAW AND THE SOVEREIGNLY DIRECTED CONTRACT

Access, Supply and Grant Contracts for anti-Tuberculosis (TB) Medicines at WHO/Stop TB Partnership/Global Drug Facility¹

John F. Loeber, Port-au-Prince, Haiti

In memoriam of my father Professor Dr. Dr. h.c. Dietrich A. Loeber (1923–2004)

I. BACKGROUND

The Stop TB Partnership (TBP) Secretariat was hosted at the World Health Organization (WHO) in Geneva, Switzerland, from 2001 until 2014. The TBP is a network of some 1,300 governments, donors, industry, NGOs, academia and other partners, joined in the common fight against tuberculosis (TB).³ Partnerships hosted at WHO operate with their own budgets and programmes, contributing to the institution's financial resources in return for benefiting from the institution's name and administrative structure, but lack their own juridical personality. Other examples of partnerships hosted by the WHO include the Rollback Malaria Partnership and the Partnership for Maternal, Newborn and Child Health. The TBP provides access for countries to quality assured and affordable anti-TB medicines via the TBP's procurement arm, the Global Drug Facility (GDF). The value of medicines ordered by/through GDF in 2009 amounted to approx. \$75 million (\$50 million for first-line anti-TB medicines and \$25 million for second-line anti-TB medicines). GDF has delivered medicines to 22 million TB patients in over 100 countries during its twelve years of operation, as a result of financing by bilateral and multilateral donors such as USAID, The Global Fund to Fight Aids, Tuberculosis and Malaria (The Global Fund) and UNITAID.

¹In regard to contractual relationships, this article covers the period between 2007-2010, drug-susceptible TB, and 2007-2009, drug-resistant TB. The author presented this article on June 12, 2016, at the Conference on *International Commercial Law Contracts* at the Merton Centre for European Integration and International Economic Order of Goethe University, Frankfurt am Main, Germany.

² From 2007-2014, John F. Loeber served as Procurement Team Manager and Principal Officer for Contracts and Commercial Affairs at the Global Drug Facility, Stop TB Partnership, World Health Organization. Loeber was responsible for procurement of anti-TB medicines (drug-susceptible TB; drug-resistant TB 2007–2009) and diagnostics. Since October 2016, Loeber serves as Chief Procurement Officer, UN Stabilization Mission in Haiti (MINUSTAH) and UN Mission for Justice Support in Haiti (MINUJUSTH).

Note that the views expressed in this article are those of the author and do not necessarily reflect the views of the United Nations.

³ See Who We Are, What We Do, STOP TB, http://www.stoptb.org/ (last visited Mar. 6, 2018) (explaining that "Since 2015 the TBP is hosted at the *United Nations Office for Project Services* (UNOPS).")

Partner countries wishing to access quality assured, affordable medicines, while also submitting to programmatic screening and benefiting from technical advice, could submit applications, mostly via their national TB programmes or Ministries of Health. For drug-susceptible TB and delivery of first-line anti-TB medicines, applications were to be addressed to GDF; for multi-drug or extremely resistant TB, applications were to be sent to the Green Light Committee (GLC). The GLC Initiative, ⁴ established in 2000, was then a special mechanism that enabled access to high-quality and affordable second-line anti-TB medicines for the treatment of drugresistant (DR) TB, a, particularly harmful, dangerous form of TB requiring intensive and prolonged medical attention. The GLC Initiative, comprised the GLC Committee, the WHO/GLC Secretariat, the GDF and partner organizations, which provided financial and technical assistance, ⁵ whereby the GLC Secretariat was integrated into the WHO's Stop TB Department (STB). ⁶

II. MECHANISMS

In the following sections of this article, a distinction shall be drawn between A) drug-susceptible TB and B) drug-resistant TB in terms of the procurement process and contracting aspects.

A. Drug-Susceptible TB

Depending on its application for a) *Direct Procurement*⁷ or b) a grant, the country received either:

a) Access to WHO/GDF's contracted procurement agent (PA) for first-line anti-TB medicines by signing of an *Order Form & Technical Agreement* (TA) with WHO/GDF. The access included the possibility of purchasing quality assured, affordable first-line anti-TB medicines (adult and paediatric) on a reimbursable basis. In this case the medicine was purchased from the Deutsche Gesellschaft für Internationale

⁴ The Green Light Committee (GLC) Initiative: Frequently Asked Questions, World Health Org. 1-2 http://www.who.int/tb/challenges/mdr/greenlightcommittee/glc_faq.pdf (last visited Mar. 6, 2018).

⁵ Salmann Keshavjee, *Role of the Green Light Committee Initiative in MDR-TB Treatment Scale-up*, at 9, WORLD HEALTH ORG. (Apr. 3, 2009), *available at* http://www.who.int/tb_beijingmeeting/media/press_pack/presentations/day3_presentation4.pdf
⁶ *The Global TB Programme*, WORLD HEALTH ORG., http://www.who.int/tb/about/en/

⁽last visited Mar. 6, 2018).

Top TB, http://www.stoptb.org/gdf/applying/default.asp (explaining that for Direct Procurement, clients employ own funds) (last visited Mar. 10, 2018).

Zusammenarbeit (GIZ) GmbH ⁸ or Partnership for Supply Chain Management (PFSCM).

The TA, forwarded via the respective WHO Country Office, was conditional on signing a further, direct commercial contract for reimbursable procurement services between the country and the procurement agent, regulating delivery and payment terms (the WHO/GDF form indicated explicitly "This Order Form is NOT the Purchase Contract.")⁹

The procurement was regularly financed by grants of The Global Fund, other third party funds and/or the country's own funding. After clarifying details, the country's order details were passed on to the procurement agent via GDF's electronic *Order Management System*.

b) Cost-free delivery of first-line anti-TB medicines, should the country fulfil the grant conditions. After approval of the country's application by the TBP *Coordinating Board*, based on recommendation of the GDF's *Technical Review Committee*, the country received a *Grant Letter of Agreement* from WHO/TBP for countersignature (Grant Agreement / GA). The GA could also be preceded by a decision letter, i.e. an administrative act. Such letter indicated if the grant was declined or accepted. If accepted, medicines were supplied by the procurement agent. The grants were financed by USAID, bilateral US governmental funding, and UNITAID (for paediatrics).

B. Drug-Resistant TB

As soon as the GLC approved a country's application containing its treatment proposal in one of the GLC's regular Meetings, the country received a respective notification and a Letter of Agreement (LoA) with WHO/GLC. As for drug-susceptible TB (section A above), the country was entitled to either:

a) Access to WHO/GDF's contracted procurement agent for second-line anti-TB medicines (adult – there were no paediatric formulations on the market), the International Dispensary Association (IDA) Foundation, and thereby its high-quality, concessionary priced medicines for the treatment of drug-resistant TB. As under case A a) above, the country and IDA as the procurement agent completed an additional direct contract on reimbursable procurement services, upon which the LoA

⁸ Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ), Federal Ministry for Economic Cooperation and Development,

http://www.bmz.de/en/ministry/approaches/bilateral_development_cooperation/players/selection/gtz/index.html (last visited Mar. 6, 2018) (explaining that GIZ is formerly the "Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)").

⁹Replicated with kind permission of WHO; the current order form is available at STOP TB, http://www.stoptb.org/gdf/drugsupply/procurement_forms.asp (last visited Mar. 10, 2018).

was contingent. Medicines were regularly financed by The Global Fund

Following signature of the LoA, countries would submit a *Procurement Request Form* to GDF with more details on both technical aspects, e.g. on treatment regimens and schedules, and commercial aspects, such as preferred date(s) of delivery, preferred shipment mode, and drug registration requirements. After clarifying all details, the procurement request was passed on to IDA via the electronic *Order Management System*.

 Cost-free delivery of second-line anti-TB medicines. The provider was IDA, and medicines were funded by UNITAID.

Combinations of a) and b) were also possible.

III. JUNCTION OF CONTRACT TYPES

In the above cases II A a) and II B a), the three-way relationship among WHO (TBP, STB, GDF, GLC), the procurement agent (GIZ/PFSCM/IDA) and the country is of particular interest from a legal perspective. While the TA and LoA between a United Nations (UN) Organisation and a country qualify as agreements under international administrative law, the direct procurement services contracts, between the procurement agent and the country, can be identified as regular international commercial contracts.

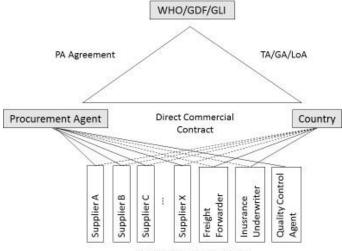


Figure 1: Contractual Relationships

A. Enabling Acts and Directed Contracts

In both cases, II A a) and II B a), the country received access to the best prices for quality anti-TB medicines achieved by the procurement agent through international competitive tendering. In case II B a) the LoA both entitled and obligated the applicant country to enter into a private law commercial contract with the procurement agent if it wished to further subject itself to the benefits of the GLC Initiative. The agreements entered with the countries functioned as enablers for the subsequent private law, commercial delivery contracts.

The LoA for second-line medicines prescribed a range of specific points in respect to the subsequent commercial arrangement between the country and the procurement agent, pointing to a possible sovereignly directed contract, such as ¹⁰:

- Art. 2. "[Procurement Agent] will require your Institution to reimburse [Procurement Agent] for the total concessional purchase price"
- Art. 3. "[Procurement Agent] will be entitled to require that your Institution pay the costs incurred by [Procurement Agent] in providing the procurement service"
- Art. 5. "[Procurement Agent] will deliver the Drugs, Ex Works... Upon request ... [Procurement Agent] will deliver the Drugs Carriage and Insurance Paid (CIP) (Incoterms 2000)"
- Art. 9. "Should [Procurement Agent] be obliged to delay shipment ... your Institution will be required to reimburse [Procurement Agent] for reasonable additional warehousing costs, as well as reasonable financing costs"
- Art. 12. "As a condition for the supply of the Drugs by [Procurement Agent] ... your Institution will be required to purchase all, and the total quantity of, the Drugs needed ... from [Procurement Agent]. Thus, if for the Project, your Institution wishes to benefit from the concessionary price(s) ... you will not ... be free to negotiate directly with the manufacturers and/or suppliers of the Drugs and/or independently procure the Drugs for the Project."
- Art. 14. "Your Institution undertakes to use the Drugs supplied by [Procurement Agent] only for the treatment of the patient cohort of the Project."

¹⁰Replicated with kind permission of WHO; see generally http://www.who.int/tb/publications/tb-glcannual2007-report/en/ (last visited 22 March 2018).

Art. 20. "The general sales and delivery conditions of [Procurement Agent] ... will be applicable between your Institution and [Procurement Agent]"

Another example of the LoA contains an additional Art. 27.: "The Institution and [Procurement Agent] will conclude the Contract, which may specify the above-mentioned terms of delivery"

Final paragraph Here the LoA additionally made clear to "indicate your acceptance of the above by arranging ... to sign the original of this Letter of Agreement and return it to us for our files."

Other procurement avenues for the second-line medicines were specifically, and as a matter of principle, excluded both by the LoA and the procurement agent services contract entered into between WHO/GDF and the procurement agent.

The TA for first-line medicines was less prescriptive as, most importantly, it allowed parallel purchasing of medicines, i.e. the relationship with the procurement agent/manufacturers was non-exclusive. However, the TA still included the preferred date(s) of delivery, albeit with the qualifier "The expected date of delivery (ETA) is based on when the order is placed with GDF suppliers, which is in turn based on when the client signs the purchase Contract with the GDF Procurement Agent", and requested details such as whether it is possible to ship and import the products while the [drug] registration process is ongoing. 11

IV. NATIONAL LEGAL PERSPECTIVE RELEVANT TO THE INTERNATIONAL CONTEXT

A. Legal Systems

The constructions in the encountered agreements raise interesting questions from a legal systems point of view.

A.1 A prior enabling administrative act by a public institution, allowing or prescribing conclusion of a private sector contract, substituting own initiative(s) of the private actors, is a more rarely encountered, but not unfamiliar legal instrument in national legal environments. ¹² Examples include securing basic functions, such as electricity and gas supply, public transport or monopolistic services. ¹³ In the cases examined here, the

 ¹¹Replicated with kind permission of WHO; the current order form is available at STOP TB, http://www.stoptb.org/gdf/drugsupply/procurement_forms.asp (last visited Mar. 10, 2018).
 ¹² See e.g. Karl Larenz, Lehrbuch des Schuldrechts, 1 Allgemeiner Teil 50 (14th ed. 1987); JÜRGEN ELLENBERGER, PALANDT, BÜRGERLICHES GESETZBUCH, Introduction before § 145, recital 12 (75th ed. 2015). Under comparative law aspects, see also Dietrich André Loeber, Der hoheitlich gestaltete Vertrag 120-21, 265-74 (1969).

¹³ Ellenberger, *supra* note 12, at recital 8.

enabling act is generally contained in an agreement, rather than taking the form of a distinct and separate administrative act. However, an administration is free to choose the form of an administrative action, whether this be through an individual act, general order, contract (public or private) or otherwise.¹⁴

A.2 A sovereignly directed, private law contract is per se an anomaly in the civil law of market economies. A directed contract, an *obligation ex lege*, ¹⁵ contradicts the basic premises of civil law, ¹⁶ which is based on the expression of the free will of responsible citizens and legal persons, operating as economic actors (principle of freedom of contract ¹⁷). Such a phenomenon of a directed contract has therefore been encountered with concern or indignation ¹⁸ and found to be a very curious construction, exhibiting an excess of confidence in statutory regulation, while cutting back on private law. ¹⁹

Building on the basic distinction in international law between public international law and private sector international commercial law, incidences of sovereignly directed contracts cannot be excluded in the latter, which reflects common principles of law in a wide range of states. With respect to the UNIDROIT Principles of International Commercial Contracts, restating principles of international law, there is in this respect recognition that the duty to contract may occur as an exception to the principle of freedom of contract, which is also a core principle in this codification of international private law.²⁰

¹⁴ In Germany: HARTMUT MAURER, ALLGEMEINES VERWALTUNGSRECHT 359, § 14 recital 1 (17th ed. 2009); public contract as a mode of administrative action: Colin C. Turpin, VII *International Encyclopedia of Comparative Law* part 1, ch 4, ¶ 33 §§ 4-33 (Arthur T. von Mehren ed. 2008) (referring to "Contracts in General," "Public Contracts," and "The Law of the Contract").

¹⁵ Jan Busche, *Münchener Kommentar zum Bürgerlichen Gesetzbuch*, 1 Allgemeiner Teil § 145, recitals 12-22 (Franz Jürgen Säcker 6th ed. 2012).

¹⁶ See Loeber, supra note 12, at 93.

¹⁷ Loeber, *supra* note 12, at 2, 93; LAURA SAUTONIE-LAGUIONIE ET AL., EUROPEAN CONTRACT LAW 423 (Bénédicte Fauvarque-Cosson & Denis Mazeaud ed. 2008) (produced by Association Henri Capatant des Amis de la Culture Juridique Française and Société de Législation Comparée).

An alternative dogmatic solution would be to altogether exclude the sovereignly directed contract from the concept of *contract*, limiting such to voluntaristic contracts, and handling the former as a quasi-contractual relationship. *See* Loeber, *supra* note 12, at 161-65, 212-16, 258-65, 304-09. The question is valid and particularly requires further examination in the context of international private law. However, in the scope of this article the institute of "*contract*" will be assumed, corresponding also to its common linguistic and practical usage in law in action. Loeber, *supra* note 12, at 162.

¹⁸ See Loeber, supra note 12, at 93, 205-06.

¹⁹ Justus Wilhelm Hedemann, Das bürgerliche Recht und die neue Zeit 17-18 (1919).

²⁰ UNIDROIT Principles 2010, http://www.unidroit.org/instruments/commercial-contracts/unidroit-principles-2010 (last visited Mar. 6, 2018) (referring to Preamble 4b, art. 1.1, comment 2).

Moreover, unequal contracts in international public law are admissible -- the inequality does not render them non-binding.²¹

A.3 A sovereignly directed contract is characterised by (i) the contract (ii) the external (third party) direction, whereby (iii) the direction is provided by the government/state by (iv) the executing administrative authority. ²² Transposing this concept to the international level, the characteristics will remain the same, however with the government/state replaced by an inter-governmental institution or other equivalent international authority, and subject to case-by-case examination.

Without entering details on the definition of contract under international law and applying the principle of law in action, ²³ the delivery contracts entered into by the countries with the procurement agent can be qualified as contracts.

Direction is given when a legal relationship is determined, e.g. determination of its contents.²⁴ Given the lengthy and detailed prescriptions, of the LoA on the subsequent contract between the country and the procurement agent, this attribute is present too. The direction is provided by an inter-governmental institution, in this case a UN Specialised Agency, thereby satisfying criterion (iii). However, whether this was done in authoritative way (iv) requires further examination.

The difficulty arises due to the prior administrative act having taken the form of a contract in contrast to a distinct execution of *administrative authority*.²⁵ In the case of a contract, the obligated party may have voluntarily submitted itself to the regulation.

A.4 Legal literature on national law distinguishes between a *coordinating* and *subordinating* administrative contract. ²⁶ While a coordinating contract is an arrangement between equal public authorities, a subordinating contract is an arrangement among parties which are otherwise in a relation of superiority/subordination, and could hence be regulated by an administrative act.²⁷

The distinction may be considered also in the international and inter-governmental context on a case-by-case basis dependant on applicable

 $^{^{21}}$ Alfred Verdross & Bruno Simma, Universelles Völkerrecht 280, 478-79 (3rd ed. 1984) (see \S 459, 753).

²² See Loeber, supra note 12, at 162-63, 304.

²³ See generally supra note 17.

²⁴ Loeber, *supra* note 12, at 162.

²⁵ *Id.* at 109-12.

²⁶ Maurer, *supra* note 14, at 373-74, § 14, recitals 12-13; Rolf Stober & Winfried Kluth, *Verwaltungsrecht I* 637-44, §54, recitals 32-52 (12th ed. 2007) (established by Hans J. Wolff and continued by Otto Bachof).

²⁷ Elke Gurlit, *Allgemeines Verwaltungsrecht* 734-35, §29, recitals 6-7 (Dirk Ehlers & Hermann Pünder, 15th ed. 2016); *see* Maurer, *supra* note 14, at 373-74.

norms. While according to WHO's Constitution, it provides assistance to governments only on request or acceptance of the government, it also, and as a primary function, holds a directing and coordinating role in international health work, supplemented by its general function to take all necessary action to attain the objective of the Organization. ²⁸ The Constitution therefore allows for both executory and directing functions of the Organisation, i.e. the possibility of both coordinating and subordinating contractual relations.

For the WHO/TBP/GDF and WHO/STB/GLC grant contracts under options II A b) and II B b), the contracts could be considered subordinating in nature, given the authoritative nature of the agreements, the free distribution of essential medicines administered by WHO, and that the relationship could have been regulated by an administrative act as well.

For the WHO/TBP/GDF and WHO/STB/GLC Direct Procurement contracts under options II A a) and II B a) further analysis is indicated below.

A subordinating relationship would not be given in the case of voluntary subjugation, such as in the private law, transactional context. In view of limited public budgets for health, oftentimes limited resources and limited access to affordable, quality-assured medicines, voluntary subjugation of government buyers is not evident. Individual determination of a subordinating administrative relationship, in contrast to a partner-based (coordinating) administrative relationship, is difficult and hence often debatable, particularly when characteristics of hierarchy are merged with contractual elements.²⁹

For drug-resistant TB there would appear to be several circumstances pointing to a subordinating relationship:

a) In 2006/2007 adding to an intensifying crisis in multi-drug resistant TB (MDR-TB), the acute threat to global public health of extensively drug-resistant TB (XDR-TB), a rare form of MDR-TB, emerged and was highlighted in an emphatic way by TB stakeholders. A Global Task Force on XDR-TB was convened by WHO in 2006, followed by publication of (i)The Global MDR-TB & XDR-TB Response Plan 2007-2008,³⁰ (ii) a 2008 Emergency update to the Guidelines for the programmatic management of drug-resistant tuberculosis,³¹adoption of

²⁸ WORLD HEALTH ORGANIZATION, *Constitution* ch. II, art. 2, paras. (a), (c), (d) & (v), *available at* http://www.who.int/governance/eb/who_constitution_en.pdf (last visited Mar. 6, 2018).

²⁹ Loeber, *supra* note 12, at 110.

 $^{^{30}\,\}rm World$ Health Organization, The Global MDR-TB & XDR-TB Response Plan 2007-2008, 1 (2007), available at

 $http://www.stoptb.org/events/world_tb_day/2008/assets/documents/news/WHO_HTM_TB_2007.387_eng.pdf.$

³¹ WORLD HEALTH ORGANIZATION, Emergency update to the Guidelines for the programmatic management of drug-resistant tuberculosis (2008), available at http://www.who.int/tb/challenges/mdr/programmatic_guidelines_for_mdrtb/en/.

(iii) the 2009 World Health Assembly Resolution WHA 62.15 on Prevention and control of multidrug-resistant tuberculosis and extensively drug-resistant tuberculosis,³² and finally issuance of (iv) the 2009 the Beijing "Call for Action" on Tuberculosis Control and Patient Care.³³

In 2008, an estimated 440,000 MDR-TB cases emerged and only about 1 % of the estimated cases were enrolled in treatment by GLC Programmes.³⁴ More broadly, in 2008 - 2009, the highest ever number of MDR-TB cases was reported to the WHO and only 3 % of MDR-TB cases were treated according to WHO standards in 2008.³⁵

XDR-TB was recognised in 2006 as a major threat to progress in controlling MDR-TB³⁶. About 5 % of MDR-TB cases were found to have XDR-TB.³⁷ The 2007 - 2008 Response Plan³⁸ more generally identified XDR-TB as a serious emerging threat to global public health, and that XDR-TB

"raises the possibility that the current TB epidemic of mostly drugsusceptible TB will be replaced with a form of TB with severely restricted treatment options. This phenomenon would jeopardize the progress made in recent years to control TB globally and would also put at risk the plans to progress towards universal access to HIV prevention and treatment. ... The economic, social and health security of countries and communities with a high prevalence of TB would be threatened by virtually untreatable TB among the breadwinners, parents and economically productive age groups."

Also, the Report states "Full implementation of this Response Plan will save the lives of 134 000 people affected by MDR-TB and XDR-TB by the end of 2008."

 $^{^{32}}$ See generally WORLD HEALTH ORGANIZATION, $67^{\rm th}$ Assembly "Resolution WHA 62.15" (May 2009), available at

http://www.who.int/tb/features_archive/wha62_15_tb_resolution/en/.

³³ See generally WORLD HEALTH ORGANIZATION, Beijing "Call for Action" on Tuberculosis Control and Patient Care (2009), available at

http://www.who.int/tb_beijingmeeting/media/en_call_for_action.pdf.

³⁴ WORLD HEALTH ORG: 2010 GLOBAL REPORT ON SURVEILLANCE AND RESPONSE, *Multidrug and extensively drug-resistant TB (M/XDR-TB)* 25 (2010), *available at* http://www.who.int/tb/features_archive/m_xdrtb_facts/en/.

³⁵ Beijing "Call for Action", supra note 33.

³⁶MDR-TB & XDR-TB Response Plan, supra note 30, at 3. There were also reports in public media of individual incidents, such as "[i]n 2007, an Atlanta lawyer recently diagnosed with MDR-TB defied a CDC warning and flew to Europe to get married. Andrew Speaker then flew to Canada and drove back into the U.S. before turning himself in for forcible isolation." Lauren Weber, This Disease Could Kill 75 Million People By 2050, HUFFINGTON POST (Dec. 10, 2015), https://www.huffingtonpost.com/entry/tuberculosis-mdr-tb-treatment_us_56211f2be4b06462a13bc8fd.

³⁷ 2010 GLOBAL REPORT ON SURVEILLANCE AND RESPONSE, *supra* note 34 at 2.

 $^{^{38}\,}MDR\text{-}TB$ & XDR-TB Response Plan, supra note 30, at 1, 3.

The Beijing Call for Action mentioned that "The global threat of M/XDR-TB can be halted if we respond urgently ... If we fail to do so, we are aware our countries will face the prospect of a bigger M/XDR-TB epidemic". In the Call for Action, WHO was also urged to "strengthen the Green Light Committee mechanism to help expand access to concessionally-priced and quality assured second-line medicines." ³⁹

The 2009 WHA62.15 urged WHO Member States to achieve universal access to diagnosis and treatment of MDR- and XDR-TB,⁴⁰ which had 50 – 200 times higher cost (MDR-TB), and approximately twice that amount (XDR-TB), than for drug-susceptible TB.⁴¹

Overall, in the 10 year period from 2000-2009, of an estimated 5 million MDR-TB cases, only 0.2-0.5 % were treated in GLC approved programmes, 1.5 million died, and the remaining 3.5 million had an unclear destiny, including death and further on-transmission.⁴²

Issuance of the LoAs had to be seen in this most dramatic setting characterising the period from 2006 - 2009.

- b) The dissimilarity of the parties (nation state and international organisation) and convening role of WHO.⁴³
- c) Most importantly, there was no practical alternative to obtaining access to affordably priced, quality assured second-line anti-TB medicines. WHO/GLC intentionally constructed the relationship with the procurement agent/manufacturers as exclusive in order to prevent other, ineffective and non-quality assured sourcing of these medicines. The Global Fund made it a condition for its MDR-TB grants that all procurement proceeded via the GLC/GDF mechanism.⁴⁴ In its initial years, the GLC brought down the cost of second-line medicines per patient extensively, as much as 25-fold compared to the standard reference country cost.⁴⁵ Therefore, there was effectively no real option

³⁹ Beijing "Call for Action," supra note 33.

⁴⁰ See WHA 62.15, art. 1 (1), supra note 32.

 $^{^{41}}$ See 2010 GLOBAL REPORT ON SURVEILLANCE AND RESPONSE, supra note 34 at 2; see also TB & XDR-TB Response Plan, supra note 30, at 19.

⁴² Salmaan Keshavjee, *Background on the Green Light Committee and the Second Line Tuberculosis Drug Supply Chain*, NATIONAL ACADEMIES 14 (July 31, 2012), *available at* http://www.nationalacademies.org/hmd/~/media/Files/Activity%20Files/Research/DrugForum/2012-JUL-31-AUG-01/731%20%20Session%20I%20%20Keshavjee%20Salmaan.pdf.

⁴³ Salmaan Keshavjee identified respective political interests of WHO as "[GDF funds from donors] provide leverage over countries = source of power" and "[n]eeds a "raison d'être" (current system aligns with self-perception as central convener)." *Id.* at 24.

⁴⁴ See The Global Fund, Board Decisions: GF/B03/DP15 at Agenda Item 10, decision point (A)(3)(b)) (Oct. 10, 2002), http://www.theglobalfund.org/en/board/decisions/. This decision is referred to by Keshavjee as granting "the GLC a monopoly which created moral hazard." Salmaan Keshavjee, supra note 42, at 17.

⁴⁵ Salmaan Keshavjee, *supra* note 42, at 19.

for most countries to not utilise this form of centralised, global pooled procurement. 46 The "free" conclusion of a contract in the face of having to purchase vitally needed goods does not preclude the presence of authoritative direction. 47

- d) The dependency of access to second-line medicines on the pre-pended GLC mechanism, which foresaw a thorough review process before approving a country's application. In this process, which included a site visit, the GLC confirmed or established drug-resistant TB patient numbers (cohorts), treatment regimens (medicines), timelines, procurement channels (GDF and its contracted procurement agent) and other details. For expansion of the cohort and additionally needed medicines, a supplementary request had to be submitted to the GLC. Additionally, given that the GLC Initiative lacked its own legal personality, more weight is attached to document(s) issued by WHO. This is supported by the formulation in the LoA "please note that WHO considers it essential to ensure the integrity of the review process by the Green Light Committee. As you know, this process is aimed at promoting that second-line anti-TB drugs are used properly, i.e. in order to prevent the rapid development of resistance to these drugs." 49
- e) The emphatic language of the LoA (e.g. Art 3: "[Procurement Agent] will be entitled to require that your Institution pay") and the length and number of prescriptions for the relationship between the country and the procurement agent.
- f) The review and acceptance of the *Procurement Request Form* by WHO/GDF containing details on technical and commercial aspects (e.g. preferred date(s) of delivery), forwarded to the procurement agent for incorporation into the contract between the procurement agent and the country.
- g) The exclusion of other purchasing routes outside the procurement agent. In particular, the combination of the GLC mechanism and the exclusive arrangement with the procurement agent/manufacturers for accessing needed second line medicines is remindful of similar, exclusive arrangements in the national context. For example, for the use of governmental institutions, such as a slaughterhouse, a

⁴⁶ See Tim Cullinan, Drug-resistant tuberculosis: desperate measures?, 357 Lancet

^{1124 (}Apr. 4, 2001) (with Cullinan expressing criticism on the role of WHO).

⁴⁷Loeber, supra note 12, at 144.

⁴⁸ See GLC Initiative, supra note 4, at 8.

⁴⁹ Introductory paragraph of LoA, replicated here with kind permission of WHO.

subordinating relationship is regularly assumed and hence occurrence of a sovereignly directed contract.⁵⁰

- h) Combating TB was also among the specific goals and targets of the MDGs⁵¹:
 - -- Goal 6: Combat HIV/AIDS, Malaria and other Diseases, Target 6C: Halt by 2015 and begin to reverse the incidence of malaria and other major diseases;
 - -- Goal 8: **Develop a Global Partnership for Development, T**arget 17: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries.

The LoA under option II B a) thus fulfills the criteria of a sovereignly directed contract. For drug-susceptible TB and the TA used for Direct Procurement under option II A a), there are more indicators of a coordinating administrative contract. Yes, tendencies of direction may still be discernible and particularly less well-resourced or functioning administrations of affected states had fewer practical alternatives for purchasing comparable medicine at low prices and with equally assured quality. However, a number of the characteristics found for the LoA under option II B a) are not given. Specifically, (i) the severe crisis pertained to MDR- and XDR-TB, (ii) the arrangement with the procurement agent/manufacturers was non- exclusive and (iii) the contract language was less emphatic and the number of guiding formulations much reduced.

The procurement services agreements between WHO/TBP/GDF and the procurement agent(s) also provided detailed directions on the contractual arrangements between the procurement agent and manufacturers, the freight forwarder etc. Despite being concluded between a public sector and private sector actor, for which a subordinating contract would regularly be assumed⁵², it can be reasoned that these contracts were of a coordinating nature. The procurement agents are private sector actors, voluntarily engaging with the public sector in a competitive bidding exercise for the provision of services, thus taking on a coordinating role for the further supply chain. WHO/TBP/GDF relied on the procurement agents to coordinate the largest part of the supply chain for the provision of essential TB medicines. Outsourcing functions to industry leaders, to the greatest extent possible, ⁵³ was an essential element of the operational strategy of GDF.

⁵¹THE UNITED NATIONS, We Can End Poverty: Millennium Development Goals and Beyond 2015, http://www.un.org/millenniumgoals/aids.shtml (last visited Mar. 6, 2018).

⁵⁰Loeber, *supra* note 12, at 111.

⁵² Cf. Maurer, supra note 14, at 384, recital 12.

⁵³ The GDF founding document, the *Global TB Drug Facility Prospectus* of 2001, states in its art. 25, "A lean management team would rely maximally on contractors to ensure effective financial, procurement, legal, and monitoring functions." WORLD HEALTH ORG.,

This conclusion in fact reflects a new approach on the differentiation between the two types of contracts in German administrative law. The traditional position, that private sector actors are weaker and therefore a subordinating contract is entered, has been challenged.⁵⁴ For example, with reference to municipalities' dependence on investors in inducing industrial settlement and respective administrative contracts entered with such investors, the private sector can no longer be regarded as being in an inferior position. These types of contracts consequentially have to be regarded as coordinating contracts, reflecting the equal level between the parties.⁵⁵

A.5 Aside from the above differentiations, a further distinction may be drawn between a *general* and *specific* obligation to contract, as commented in literature on the German legal context.⁵⁶ There, a general obligation can be derived from the German civil code, as long as the law foresees contract formation to achieve performance exchange. Any specific obligation to contract will be contained in specific private law, i.e. outside of the general civil code.⁵⁷

In the TB context, a specialised law or regulation obliging a state to cooperate in the fight to eliminate the disease is not identifiable.⁵⁸ Rather, general legal provisions are most relevant, such as the rights of WHO listed in the WHO Constitution, with corresponding obligations on Member States, and responsibilities found in the UN Charter on maintaining peace and security and achieving cooperation in solving international problems and respecting human rights (Art. 1, paras. 1 and 3).

A.6 A supplementary differentiation may also be made between a *direct* and *indirect* obligation to enter into a private sector contract as a result of the enabling act. ⁵⁹ While the direct obligation leads to an enforceable civil law claim for concluding a contract, an indirect obligation only leads to a reflex type claim for contract formation, based on the respective interests of the parties. ⁶⁰

For the anti-TB medicines contracts under discussion under options II A a) and II B a), a direct obligation can, in any event, be excluded in light of the fact that WHO is primarily a normative body and not an

Global TB Drug Facility Prospectus, STOP TB (2001), available at http://www.stoptb.org/assets/documents/gdf/whatis/GDF-Prospectus.pdf.

⁵⁴ JÖRN IPSEN, ALLGEMEINES VERWALTUNGSRECHT 198, recital 794 (9th ed. 2015).

⁵⁵ Id.

⁵⁶Busche, *supra* note 15.

⁵⁷ Id.

⁵⁸ While there are declarations, pledges etc. of states to fight TB there is no binding international agreement such as the 2005 WHO Framework Convention on Tobacco Control (WHO FCTC).

⁵⁹ Loeber, *supra* note 12, at 120-44.

⁶⁰ Id. at 121-60.

implementing agency. While under its Constitution, WHO has a directing and coordinating role with the authority to take action to attain the Organisation's objective, WHO provides assistance only on request or acceptance of the government. Specific circumstances would therefore need to prevail for a different conclusion to be drawn. Furthermore, the contracts do not contain assignments of WHO's rights vis-à-vis the procurement agent or the country. Hence, for the LoA under option II B a) an indirect obligation for contract formation between the country and the procurement agent must be assumed.

A.7 A further progression altogether would be a *dictated contract*, in which the contract is in fact concluded through the administrative act or a court decision.⁶² However, such construction is not evident for the delivery contracts under section II above, aside from the fact that it would seem unconvincing to derive such authority from the WHO Constitution.

B. Market vs. Planned Economy

For reasons of serving the public interest and in the case of a public emergency, even purist schools of thought in private law nevertheless recognise the necessity and place of a directed contract in private law.⁶³ This type of contract occurs in the national context, for example, when municipalities assign temporary lodging to citizens in need of shelter, or a lawyer is assigned to a party by the court. The construction is intensified when taking the form of a compulsory contract, employed for instance in the forced sale of real estate for public purposes.⁶⁴

In the planned economies of Socialist states, in contrast, sovereignly directed contracts took on a central or primary role ⁶⁵ – a logical consequence of a directed political and economic system. All economic

⁶¹ WHO CONSTITUTION, *supra* note 28, at chap II, art. 2 paras. (c)-(d).

⁶² In German law: See Larenz, *supra* note 12 (critiquing such contract as a contradiction in itself); Ellenberger, *supra* note 12, at Introduction of § 145, recital 12; Loeber, *supra* note 12, at 145, 148, 206, 208.

 $^{^{63}}$ See e.g. Turpin, supra note 12, at \P 52, §§ 4-52; see also Loeber, supra note 12, at 205-06.

⁶⁴ See generally The New Oxford Companion to Law 193-94 (Peter Cane & Joanne Conaghan ed. 2008) (see heading "Compulsory Purchase"); Loeber, supra note 12, at 2.

⁶⁵ See Loeber, *supra* note 12, at 3, 44-45, 120, 315-16, 319 (on system-related differing functions of the directed contract); *see also* Arthur von Mehren, VII *International Encyclopedia of Comparative Law*, part 1, ch. 1, ¶¶ 16, 56 (referring to *Contracts in General*: II. A General View of Contract - The Social and Economic Order and Contract, distinguishing in footnote 48 between the principle of private autonomy and the planning principle; III. General Limits on the Use of Contract); Larenz, *supra* note 12, at 51 (Larenz takes a critical view, indicating that such contracts in a centrally directed economy leave little space for crafting of contents by the parties).

contracts were linked to and entered in fulfilment of the state plan. 66 Oftentimes these plans imposed upon the parties a duty to contract. 67 Noteworthy in this regard is the fact that a) there was not one plan but several, and b) it was the administrative *plan act* and not the plan itself which impacted contract formation. 68

In Western economies, sovereignly directed contracts may be the consequence of political-economic, and/or social goals, market structure correction, the intention of guiding the movement of goods and services, and/or securing basic functions (in US law: essential facilities doctrine). ⁶⁹ Furthermore, averting harm to the social and economic body, the general public may be at the root of directed contracts. ⁷⁰ Brought together, this can be captured under the aforementioned notion of *public interest*, understood at its core as a situation in which the collective is affected in such way by the endangerment of the individual that an intervention against the latter is justified. ⁷¹

Interestingly, the European Union (EU) with its Common Agricultural Policy (CAP), leading to expenses of earlier up to nearly 70% to now around 38% of its total budget, ⁷² exhibits a strong, directive orientation, essentially securing a minimum income for agricultural producers.⁷³ While for many years, the agricultural market was primarily regulated through interventions (e.g. intervention purchases of milk products ⁷⁴), today, direct payments are made to producers. ⁷⁵ It has consequentially been indicated that for the agricultural markets of the EU, principles of planned economy rather than market economy are being realised. ⁷⁶ Thus, competition rules and the principal disallowance of subsidies effectively do not apply.

⁶⁶Olympiad S. Ioffe, *International Encyclopedia of Comparative Law*, supra note 65, ch 5 ¶¶ 3, 6, 19, 21 (2008) (Contract in the Socialist Economy – II The Experience of the Soviet Union); Heinz Such, *International Encyclopedia of Comparative Law*, ib., ¶¶ 11, 16, 18 (Contract in the Socialist Economy – III Experience of the German Democratic Republic).

⁶⁷ Rudolf B. Schlesinger, I Formation of Contracts, a Study of the Common Core of Legal Systems, introduction, § II, 3(b), 26 (1968).

⁶⁸ Loeber, *supra* note 12, at 46-58.

⁶⁹ Busche, *supra* note 15, at recitals 18-19; Loeber, *supra* note 12, at 120.

⁷⁰ Loeber, *supra* note 12, at 238-39.

⁷¹ See Loeber, supra note 12, at 231-32, 239, 317.

 $^{^{72}}$ EUROPEAN UNION, $Agriculture, \;$ EUROPA, http://europa.eu/pol/agr/index_en.htm (last visited Mar. 6, 2018).

 $^{^{73}\,\}mathrm{STEPHAN}$ HOBE & MICHAEL LYSANDER FREMUTH, EUROPARECHT, recitals 1246, 1249 (8th ed. 2014).

⁷⁴ Delivery and repurchase obligations in place for milk products, cited as examples of contracting obligations by Wolfgang Kilian, *Kontrahierungszwang und Zivilrechtssystem*, Archiv für die civilistische, 180 Praxis 65 (1980).

⁷⁵ CHRISTIAN BUSSE ET AL., EUROPARECHT § 25, recital 37 (3rd ed. 2015); Stefan Lorenzmeier, Christoph Vedder & Wolff Heintschel von Heinegg, *Europäisches Unionsrecht*, art. 40, recital 8 (2012) (*Treaty on the Functioning of the European Union*).

⁷⁶ WOLFGANG KILIAN & DOMENIK HENNING WENDT, EUROPÄISCHES WIRTSCHAFTSRECHT, 109-10, recitals 211, 213-14 (5th ed. 2016).

EU industrial policy has similarly been found to distort competition by granting subsidies to enterprises in accordance with political goals. Industrial policy is one of the EU policies that moves in the direction of both market economy systems and planned economy systems.⁷⁷

In light of the above elaborations a sovereignly directed contract can *per se* hence not convincingly underpin critical analyses of economic systems in fundamental way. As demonstrated, directed contracts occur in similar form and with similar contents in both of the antithetical economic and legal systems, and in both cases serving the collective and covering basic needs.⁷⁸ Also, a directed contract may be more strongly linked to state ideology and a state's constitution, such as the intention to distribute economic goods (ideology) and processes for determining the common good (constitution).⁷⁹

For TB, the justification for the exception to the primacy of private law will be the assertion of the overriding public interest of managing a serious global public health crisis, specifically controlling and reversing the TB epidemic. 80 Particularly as a communicable, airborne disease, transmitted by coughing, sneezing, speaking etc., TB is a problem affecting people in all countries. For drug-resistant TB, the need for action to contain/reduce the spread of this debilitating and mortal form of the disease is amplified many-fold. The risk of unintelligibility in the relationship between the procurement agent and other actors in the supply chain; the reduction of the effects of pooling procurement with the procurement agent; lessening the potential to achieve lowest prices and delivery times for bulk procurement of these expensive medicines; and probably most importantly, the risk of treatment failure with non-quality assured medicines procured from sources in less regulated environments, all appear as sufficient grounds to issue directions on private sector contracts and to prohibit contracting with other agents/TB medicines manufacturers or suppliers.

Corroborating the findings on a planning approach is the context of activities of the WHO and the Stop TB Partnership as well as partners through the *The Global Plan to Stop TB 2006-2015*, published by WHO and the Stop TB Partnership. Aside from the name "Global Plan", the document contained a range of targets, indicators and envisaged actions in the fight against TB. In relation to procurement of medicines, it foresaw that "GDF will work to increase the availability of affordable, high quality drugs in all countries where there is need" "GDF will provide a cumulative total of 25 million patient treatments through both grant and direct procurement service lines." and "[s]upport for access to quality affordable anti-TB drugs will be provided in all countries where there is need." The supplementary Global

⁸⁰ See generally The Global Plans to Stop TB, STOP TB, http://www.stoptb.org/global/plan/ (last visited Mar. 6, 2018).

⁷⁷ KILIAN & HENNING WENDT, *supra* note 76, at 109, recitals 211-12.

⁷⁸ Cf. Loeber, supra note 12, at 313, 316-17.

⁷⁹ *Id*. at 317-19.

MDR-TB & XDR-TB Response Plan 2007-2008, also named a "Plan" "detailed the main activities to be conducted ... in 2007 and 2008 to operationalize the drug-resistance component of the Global Plan. It also marks the beginning of the integration of MDR-TB and XDR-TB activities into general TB control activities." At mid-term of the Global Plan, an updated Global Plan to Stop TB 2011 - 2015 was furthermore issued. The plans form part of the series of plans issued since 2001.

Finally, it will be interesting to note that the LoA under option II B a) provided direction to both parties, a feature more prevalent for the directed contract in a planned economy than in market economy systems. ⁸² This would moreover explain the regulation of multiple contract elements of the directed contract in the LoA. ⁸³

C. Contract at the Expense of a Third Party

The principle of forbidding contracts at the expense of a third party – the Roman law principle of *pacta tertiis nec nocent nec prosunt* or *pacta tertiis* rule – also valid in public international law, ⁸⁴ albeit only in relation to third party *states*, could a priori be considered to hinder issuing a directive vis-à-vis a third party in an underlying contract, obligating that party with respect to the subsequent contract. Such barrier could be considered for the contracts under options II A a) and II B a) above. However, as a) the principle is not applicable to non-state actors, and b) an administration is free to choose the particular form of its action under public law and it could have therefore also chosen an administrative act instead of a contract to reach its objectives, the contract must be considered valid as a matter of principle in this respect.

V. PUBLIC INTERNATIONAL LAW DIMENSION

What make the enabling act and directed contract topical is the fact that these are set in a public international law framework in contrast to a national public law setting. While literature on the latter is accessible, this is less available for the former. This may either be coincidental or an expression of the development of law and administration in an age of globalization and linked to the changing functions of international organizations, 85 opening up gaps in legal commentary.

⁸⁴ Malcolm D. Evans, *International Law* 197, art. 34 (2nd ed. 2006) (references Art. 34 of the Vienna Convention on the Law of Treaties of 23 May 1969); STEFAN HOBE, EINFÜHRUNG IN DAS VÖLKERRECHT, 194 (10th ed. 2014).

⁸¹ The Global Plans to Stop TB, supra note 80.

⁸² Loeber, supra note 12, at 312.

⁸³ Id.

⁸⁵ In regard to the changing functions, in particular the funding structure, of the United Nations see e.g. Barbara Adams & Jens Martens, Fit for whose purpose? Private funding and corporate influence in the United Nations, GLOBAL POLICY FORUM (2015).

A. Form of Administrative Act

Under option II A b) above the GA was drawn up as a hybrid between a public sector agreement and a commercial agreement, as it states "GDF expressly disclaims responsibility for any delays or defaults resulting from the acts or omissions of procurement or shipping agents, as well as for any delays or defaults caused by other conditions beyond its reasonable control, including, but not limited to ... substantial failure of any supplier or subcontractor to meet its obligations to GDF."86 Here too, the public administration could have chosen another form of action, such as a 'cooperative' administrative act. But, as mentioned above, an administration is free to choose the form it deems most suitable for acting. In the context of the EU for instance, subsidies can similarly be extended through administrative act or agreement, 87 requiring pre-approval under Articles 107 - 109 of the Treaty on European Union. 88 Of course the agreement could be questioned in terms of it regulating an administrative act, as the designation of the administrative instrument is not decisive. 89 However, there are no grounds which can be identified to call for such interpretation in the examined cases. Overall the GA indeed appeared best suited for setting out the public sector arrangement for delivery of anti-TB medicines.

B. Authority for Directed Contract

The public interest prevailing over private sector contract autonomy is the underlying rationale for intervention in the form of the discussed instruments at WHO/TBP, in any event for drug-resistant TB because of the severe risks of this dangerous variant of the disease. The question arises, however, if or to what extent the "end justifies the means."

While the Constitution of the WHO is seen as providing sufficient authority for directing contracts (section A.4 above), no doubt the Constitution is subject to interpretation, and in regard to management of drug-resistant TB indeed differing views have been expressed. 90

It will therefore be no coincidence that in 2011, under a new Global Framework for MDR-TB, the GLC mechanism in its then controlling form was replaced by a mechanism with a predominantly monitoring and evaluating function (of country performance) and supporting role, providing service packages, as well as foreseeing

⁸⁶Cited with kind permission of WHO/TBP.

⁸⁷ Walter Frenz, *Handbuch Europarecht*, 3 *Beihilfe- und Vergaberecht* 55, § 6, recital 179 (2007).

⁸⁸ Treaty Establishing the European Community (C 325/01), former art. 87-89 (Dec. 24, 2002).

⁸⁹ Stober & Kluth, *supra* note 26, at 636, recital 27.

 $^{^{90}}$ Cullinan, *supra* note 46 (rejecting the presumption of WHO constitutional competencies in the establishment of the GLC Mechanism).

regionalisation of GLC functions ^{.91} A consensus among stakeholders on a more effective way forward to address the MDR crisis led to the implemented change, a change that included dismantling of the authoritarian nature of the original construct.⁹²

Recently, the global GLC mechanism has been entirely abolished and replaced by the Global Drug-resistant TB Initiative (GDI). 93

It appears here that over a period of 2-3 years a process of reorientation of an understanding on the competencies of the Organisation occurred. Similar processes have occurred in the past, e.g. in handling of *influenza* pandemics.

This above development around the GLC corresponds well to the approach put forward for the directing of contract relations in German law, namely to always, under application of the principle of proportionality, consider whether the specific intervention is the mildest form of intervention.⁹⁴

C. Exclusive Contracting

The prohibition to enter into a parallel contract with the same company or a contract with another company is an exceptional feature in public international law/international administrative law. The EU explicitly supports balanced trade and fair competition, as referred to in the Preamble and Article 102 of the Treaty on European Union, and creation of a system of unaltered competition. Shall Member States of the EU subscribe to the principle of freedom of contract, and this principle is moreover directly linked to other key principles of the EU such as the freedom of movement of goods, services, capital and persons. The Agreements of the World Trade Organisation (WTO) also promote free trade among the 162 member states, in fact securing *more* choice of goods and services and a broader

⁹¹ Some documentation on the GLC transition is no longer available on the internet; but see, WORLD HEALTH ORGANIZATION, Transition Plan for the New Global Framework to Support Scale Up to Universal Access to Quality Management of Multidrug-Resistant Tuberculosis, at 2, available at

http://www.wpro.who.int/tb/glc_westernpacific/glc_transition_plan.pdf?ua=1 (last visited June 26, 2017); see also WORLD HEALTH ORGANIZATION, New Global Framework to Support Scale Up to Universal Access to Quality Management of MDR-TB, at 1-2, available at http://www.who.int/tb/challenges/mdr/greenlightcommittee/new_global_framework_summary. pdf (last visited June 26, 2017).

⁹² Keshavjee, *supra* note 42, at 40 (calling for ending the monopoly and instead purchasing the Global Fund-financed medicines from the lowest priced, quality-assured option); *see also* Larenz, *supra* note 12, at 50 (indicating that the compulsory assignment of accommodation in post-war Germany led to insalubrities, and therefore had to be given up again as soon as the worst distress had subsided).

⁹³ What's New, STOP TB, http://www.stoptb.org/wg/mdrtb/ (last visited Feb. 09, 2018).

⁹⁴ Kilian, *supra* note 43, at 80-81.

⁹⁵ C.H. BECK, GRUNDKURS EUROPARECHT 335 (Werner Schroeder eds., 4th ed. 2015).

⁹⁶ Sautonie-Laguionie, *supra* note 17, at 426, 433.

range of respective product qualities. ⁹⁷ This is also reflected in the UNIDROIT Principles, in which freedom of contract is seen as a basic principle in international trade, in fact a corner-stone of an open, market-oriented and competitive international economic order. ⁹⁸

A similar construction can perhaps be found in "non-compete" clauses in partner/employee contracts in the event of separation. In German commercial law, such non-compete clauses are only allowed where a legitimate commercial interest of the employer/enterprise can be demonstrated.⁹⁹

D. The State As A Normative Setting Body

Generally, with its public policy the state sets the normative framework for economic and other activities. Directives and regulations of the EU also set the normative framework for its Member States. On a further, international level, this axiom is less frequently encountered, yet still in place through multilateral agreements (e.g. WTO), international organisations (e.g. International Seabed Authority), but also indirectly through technical standards and norms adopted by international organisations/associations and implemented or endorsed by states, (e.g. the UN Electronic Data Interchange for Administration, Commerce and Transport Standard (UN/EDIFACT)¹⁰⁰ or the PIC/S harmonised Good Manufacturing Practice (GMP) standards and guidance documents for pharmaceuticals).¹⁰¹ A directed contract such as under the LoA takes this approach a step further, prescribing the contents of a commercial contract.

E. Public Regulation of Contractual Relationships

In his article of 1980 on contracting obligations and the German civil law system, Kilian identifies a typology of regulation of contractual performance relationships, based on the theory of regulation as put forward

⁹⁷ Members and Observers, WORLD TRADE ORGANIZATION, https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last visited Mar. 6, 2018); The WTO in Brief, WORLD TRADE ORGANIZATION,

https://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr00_e.htm (last visited Mar. 6, 2018); 10 Benefits of World Trade, WORLD TRADE ORGANIZATION,

https://www.wto.org/english/thewto_e/whatis_e/10ben_e/10b05_e.htm (last visited Mar. 6, 2018) (use archive link: https://web.archive.org/web/20160214135908).

⁹⁸ UNIDROIT, UNIDROIT Principles of International Commercial Contracts, art. 1.1, comment 1 (2016).

⁹⁹ Handelsgesetzbuch [HGB] [German Commercial Code] at 74a (Ger.).

¹⁰⁰ Recommendation 25 Use of the UN Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT), UNECE 316 (Sept. 1995), available at http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec25/rec25_95_r1079rev1e.pdf.

¹⁰¹ Introduction, PHARMACEUTICAL INSPECTION CO-OPERATION SCHEME, https://picscheme.org/en/about (last visited Jan. 13, 2018).

by US economists and lawyers. 102 The theory supports state regulation of freedom of contract as a response to social situations. Applying the theory, Kilian identifies six steps of regulation ¹⁰³:

- Step 1: General framework conditions (standard regulation)
- Step 2: Provisions on legal transactions (contracting obligations)
- Step 3: Price regulations (rate regulations)
- Step 4: Regulated industries (e.g. nuclear industry)
- Step 5: Adoption as public tasks (public utilities)
- Step 6: Social contracts (e.g. state medical insurance)

According to this scale and as extended to the international dimension, the TB contracts in question would still only be on Step 2, as prices (Step 3) were determined through competitive tendering, and not established by administrative decree. In the extreme, setting up and operating own medicines production facilities would have been on Step 5. It could in any event be considered to, as mentioned above, apply the principle of proportionality for any intervention in view of the freedom of contract and free trade principles, and thereby to always consider whether the mildest form of intervention is being applied. 104

VI. COMPARATOR ARRANGEMENTS AND RELATED QUESTIONS

A. TB Diagnostics

The construction applied for extending TB medicines grants (options II A b) and II B b)) was also encountered at WHO/TBP for delivery of advanced TB diagnostics. For the Expand TB Project financed by UNITAID, delivering advanced diagnostics for detection of drug-resistant TB to laboratories in 27 countries from 2009, ¹⁰⁵ and the TB Reach Facility, delivering molecular-based diagnostic equipment (GeneXpert technology) to 33 projects in 18 countries since 2010, 106 respective Memoranda of Understanding, Grant Agreements and Procurement Services Agreements, together with specific Product Delivery Contracts, were entered. These instruments did not consider any exclusivity clauses, due to the differing laboratory context and product market situation. However, the instruments similarly made a distinction between own commitments and responsibilities

104 Id. at 80-81.

http://www.stoptb.org/global/awards/tbreach/achievements.asp (last visited Feb. 9, 2018).

¹⁰²Kilian, *supra* note 74, at 79-80.

 $^{^{103}}Id.$

¹⁰⁵ Expand-TB, STOP TB, http://www.stoptb.org/wg/gli/expandtb.asp (last visited Feb. 9,

¹⁰⁶ TB Reach Results, STOP TB,

of the organisation and obligations on commercial aspects such as delivery times and product defects, to be followed up by recipients with the contracted suppliers and/or service providers, facilitated by the organisation.

B. The Global Fund and Directed Contracts

The Global Fund, though constituted as a "multi-stakeholder international financing institution duly formed as a non-profit foundation under the laws of Switzerland and recognized as an international organization by various national governments," has taken a more arm's length approach in guiding country recipients on procurement of supplies pursuant to grants extended to the countries. The Global Fund's Standard Terms and Conditions for funding agreements with Principal Recipients only establish general requirements for "policies and practices that [the Principal Recipient] shall use to contract for goods and services." These policies and practices must for example comply with the following requirements 109:

- Contracts shall be awarded on a transparent and competitive basis.
- Solicitations for contract bids be clearly notified, and that prospective bidders be given sufficient response time.
- Solicitations for goods and services provide all necessary information such as the terms and conditions of the contract and the goods or services to be acquired.
- No more than a reasonable price shall be paid.

On the other hand, for participation in the Global Fund's Voluntary Pooled Procurement (VPP) -predecessor to the current Pooled Procurement Mechanism (PPM) established in 2009¹¹⁰ -more detailed requirements were laid out by the Global Fund, such as contents of the request for quotation to be submitted to the Procurement Agent, issuance and acceptance of the quotation, invoice and payment modalities. ¹¹¹ Whether this exhibits a directed contract is beyond the scope of this article, as The Global Fund

 $^{^{107}}$ Bylaws of The Global Fund to Fight AIDS, Tuberculosis & Malaria , The Global Fund (Nov. 14, 2017), available at

https://www.theglobalfund.org/media/6007/core_globalfund_bylaws_en.pdf?u=636486807150

 $^{^{108}}$ Contracts for Goods and Services art. 18(a), Standard Terms and Conditions, The Global Fund (Sept. 2012), available at

 $https://www.theglobalfund.org/media/6029/core_standard terms and conditions_agreement_en.p \\ df?u=636486806900000000.$

¹⁰⁹ *Id*.

¹¹⁰ Pooled Procurement Mechanism, THE GLOBAL FUND 203 (Dec. 18, 2017), available at https://www.theglobalfund.org/media/3266/core_operationalpolicy_manual_en.pdf.

¹¹¹See id. at 208-209, 213-216.

covers the three diseases (Aids, TB and Malaria) and its public sector role requires prior analysis.

C. Public Private Partnerships

In the national context, public sector contracts with private entities may be expressions of entering Public Private Partnerships (PPPs),¹¹² enjoying increasing popularity.¹¹³ This is no different in the international context, in which PPPs have been arrangements of choice, notably also in the UN context, to address a broad spectrum of issues on the Global Agenda.¹¹⁴ Whether this is a reflection of best practice, lack of own funding / resources,¹¹⁵ tied aid, or lack of determination and planning, is the subject of a wider discussion.¹¹⁶ What is certain is that in an age of globalisation and changing functions and resources of international organizations, new linkages between the public and private sector appear consequential.

The arrangements for providing anti-TB medicines under the WHO/GDF/GLI set up may, to varying degrees, also be seen as PPPs. Roles and responsibilities of the various actors in the supply chain – from WHO, the procurement agent to the freight forwarder, quality control agent, suppliers etc. - are in any case clearly defined and the common goal of fighting TB is evident as well. Lastly the name *Stop TB Partnership* itself also points prima facie to a partnership relationship among the involved TB stakeholders. Furthermore, the employment of a public-private mix (PPM)

¹¹²Elke Gurlit, *Allgemeines Verwaltungsrecht* 734, § 29, recital 5 (Dirk Ehlers & Hermann Pünder ed., 15th ed. 2016); Stober & Kluth, *supra* note 16, at 628, recital 4; Maurer, *supra* note 14, at 366, § 14 recital 5; *see also A Practical Guide to PPP in Europe* (Maurice Button ed., 2006) (referencing "*Growth of national PPP markets in Europe* "value for money," see Introduction, §3.

¹¹³ MARTIN BURGI ET AL., ALLGEMEINES VERWALTUNGSRECHT 14 § 1 recital 16 (Dirk Ehlers et al. eds., 15th ed. 2016).

¹¹⁴ See ALEXANDER G. FRIEDRICH & VALENCE E. GALE, PUBLIC-PRIVATE PARTNERSHIP WITHIN THE UNITED NATIONS SYSTEM: NOW AND THEN 12 (2004) (discussing the history of PPPs in the UN context); see also ADAMS & MARTENS, supra note 85, at 75 (identifying the further development from PPPs to broader, multi-stakeholder partnerships for addressing today's global issues).

¹¹⁵ For example, to produce and distribute essential, but commercially non-viable medicines by state enterprises. *Cost-Containment Mechanisms for Essential Medicines, Including Antiretrovirals, in China*, WORLD HEALTH ORG. 8, http://apps.who.int/medicinedocs/en/d/Js4907e/ (last visited Mar. 6, 2018) (Health Econ. and Drugs EDM Series No. 13).

¹¹⁶ See A. Venkat Raman & James Warner Bjorkman, Public Private Partnership in Health Care in India: Lessons for Developing Countries 30, 33 (2009)

¹¹⁷ See Rajesh Gupta et al., Increasing Transparency in Partnerships for Health – introducing the Green Light Committee, 7 TROPICAL MEDICINE & INTERNATIONAL HEALTH 970, 970 (2002).

in healthcare is common, particularly in TB, 118 illustrating a specific type of

The Global Fund, though as mentioned constituted as a composite of international financing institution, non-profit foundation and international organization, interestingly also considers itself to be a PPP. 119 However, given the very significant public role and leadership function of the organization, as well as understanding PPPs in a broader sense, the identification appears justifiable and consequential.

It may nevertheless be expected that the trend of implementing PPPs for problem solving global issues will lessen over time. With the manifest emergence of multi-stakeholder partnerships to address global issues of today and tomorrow, 120 traditional PPPs on the global level are likely to recede or to have less impact. Given this development, occurrences of sovereignly directed contracts are likely to lessen too. In multistakeholder partnerships, governments are only one player among several, and therefore their influence is limited. With a broad support basis and a wide range of expertise, but also given limited available public funding, multi-stakeholder partnerships are seen by many as effective, if not superior instruments for meeting global challenges. The Sustainable Development Goals (SDGs), adopted by the UN General Assembly in September 2015 and calling for realisation of 17 goals and 169 targets by 2030, 121 may have added to this development.

Overall it appears certain that we are yet to see further developments in terms of cooperation between the public and private sector, both on international and national levels. There is no reasonable other way that the SDGs with their large number of specific goals and targets could otherwise be achieved by the global community.

D. Liability

The distinction between the agreement under international administrative law and the commercial contract is made particularly clear as

¹¹⁸ See Public-Private Mix (PPM) for TB prevention and care, WORLD HEALTH ORG., http://www.who.int/tb/areas-of-work/public-private-mix/en/ (last visited Jan. 17, 2018); José Antonio Martínez & Netty Kamp, A Strategic Guide for Building Public Private Mix Partnerships to Support TB Control, CHALLENGE TB (2011), available at http://www.challengetb.org/publications/tools/ua/Guide_PPM.pdf/.

¹¹⁹A Private Sector Guide to the Global Fund, THE GLOBAL FUND (2012), available at http://www.gbchealth.org/system/documents/category_4/374/Private%20Sector%20Guide%20 to%20Global%20Fund-July%202012.pdf?1347293290.

¹²⁰ ADAMS & MARTENS, supra note 85, at 73, 75, 125; see also U.N. Secretary-General, A Life of Dignity for All: Accelerating Progress Towards the Millennium Development Goals and Advancing the United Nations Development Agenda Beyond 2015, ¶ 69, U.N. Doc. A/68/202 (July 26, 2013).

¹²¹ The Sustainable Development Agenda, U.N., http://www.un.org/sustainabledevelopment/development-agenda/ (last visited Jan. 17, 2018).

concerns liability. Both the TA and the LoA for execution of reimbursable procurement indicate:

TA: "GDF expressly disclaims responsibility for any delays or defaults resulting from the acts or omissions of procurement or shipping agents" (Section D, Table 3b, footnote 1)

LoA: "WHO will not in any way be responsible for [Procurement Agent] meeting its obligations as set forth in this Letter of Agreement, and/or any claims, liabilities and or disputes" (Art. 21) and

"... your institution will assume full liability for any damage arising from ... the use of the Drugs as aforesaid ... No liability will attach to WHO, the Green Light Committee ...their advisors, agents and/or employees." (Art. 21)

Any ambiguity could not be afforded in the area of liability, as respective claims resulting e.g. in treatment interruption or inadequate treatment can reach high monetary amounts, not to mention also the risk of further infecting other persons.

Closely linked to questions of liability is also the immunity of the WHO (as a UN Specialized Agency) under public international law. While litigation in national courts is not possible for UN operations, these are subject to arbitration, and this was foreseen for WHO/TBP/GDF operations too. There were nevertheless no specific funds reserved at WHO/TBP to cover such exposure. Only the commercial actors, i.e. the procurement agents, suppliers and freight forwarders, had such funds at their disposal and moreover covered these risks by engaging respective insurance underwriters, also since these actors did not benefit from juridical immunity. In this situation both WHO and WHO/TBP had to be particularly diligent to not explicitly or inexplicitly take on responsibility outside of their mandates or functions. This was done via the liability clauses cited above.

Even for grant agreements under options II A b) and II B b), for which there was no direct contractual relationship between the country and the procurement agent, liability of WHO/GDF vis-à-vis the country was similarly expressly excluded for delivery delays or other defaults of the procurement or shipping agents.

Given the importance of the question of liability, in subsequent years the respective provisions were elaborated further in general terms and conditions attached to new versions of the contracts between WHO/GDF and the country, distinguishing between liability of WHO/GDF itself, the procurement agent, the manufacturers/suppliers, and other service providers.

VII. CONCLUSION

Reports indicate that progress on MDR-TB has been unsatisfactory and there is a risk of 75 million fatalities worldwide by 2050. 122 This poses part of the significant general health threat mankind faces in the coming decades due to Antimicrobial Resistance (AMR), with 10 million lives a year at risk until 2050. 123 If in MDR-TB supply chain matters a planned economy approach has encountered resistance among WHO Member States, and both planned and market economy approaches do not lead to satisfactory results, it may be timely to consider new or other measures. A preferred choice could be an International Convention on TB, effective among WHO Member States. Such a Convention would have the advantage of being supported by and being legally binding for countries and other partners, with specific, enforceable measures and goals. Such Convention would positively add to the history of achievements under Articles 2 (k) and 19 of the WHO Constitution, under which to date only the 2005 Tobacco Convention has been developed and adopted, yet with marked success. 124

 $^{122}\it{The\ Price\ of\ a\ Pandemic:\ Counting\ the\ Cost\ of\ MDR-TB,\ All\ Party\ Parliamentary\ Group\ on\ }$

GLOBAL TUBERCULOSIS (2015), available at https://docs.wixstatic.com/ugd/309c93 f0731d24f4754cd4a0ac0d6f6

 $https://docs.wixstatic.com/ugd/309c93_f0731d24f4754cd4a0ac0d6f6e67a526.pdf; \textit{see also Weber}, \textit{supra} \ note \ 36.$

¹²³ Jim O'Neill, *Tackling Drug-Resistant Infections Globally: Final Report and Recommendations*, The Rev. On Antimicrobial Resistance 4 (May 2016), *available at* https://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf.

¹²⁴ See About the WHO Framework Convention on Tobacco Control, WORLD HEALTH ORG., http://www.who.int/fctc/about/en/ (last visited Jan. 17, 2018); Haik Nikogosian, WHO Framework Convention on Tobacco Control: a key milestone, 88 BULL. WORLD HEALTH ORG. 83, 83 (2010), available at http://www.who.int/bulletin/volumes/88/2/10-075895.pdf?ua=1; Judith Mary Mackay et al., Successes and New Emerging Challenges in Tobacco Control: Addressing the Vector, 21 Tobacco Control 77, 77 (2012), http://tobaccocontrol.bmj.com/content/21/2/77.

BE CAREFUL WHAT YOU WISH FOR: HOW INTERNATIONAL TAX COORDINATION COULD NECESSITATE A U.S. PATENT BOX

Matt Karas*

I. INTRODUCTION

For decades, nations have devised ways to incentivize businesses to operate inside their borders. In particular, nations have focused more on encouraging technological development using tax deductions. For example, in 1981, the United States Congress passed the Economic Recovery Tax Act, which aimed to reverse a decline in research and development ("R&D") expenditures by providing firms with a tax credit for their expenses in this area. At least thirty-seven other nations have followed the United States in enacting R&D tax incentives since that time. While the U.S. spent more than any other nation on R&D in 2012, "its relative position (measured by the share of such investment in national income) has been falling even as other countries increase their investments in research."

More recently, some countries have begun turning to "back-end" incentives to encourage firms to pursue on-shore innovation. ⁴ One of these back-end incentives took form in 2001, when countries in Europe began to implement patent boxes,⁵ that is, preferential tax structures that apply a discounted corporate tax rate to income attributable to intellectual property ("IP") in specific ways. These regimes⁶ have two goals: (1) to encourage domestic research and development, which create jobs,⁷ and (2) to prevent the erosion of the tax base that occurs when companies shift profits to low-

^{*} Antonin Scalia Law School at George Mason University, J.D. Candidate, May 2018. I would like to thank God, my family, and my friends for their love and help throughout my years of legal education.

¹See generally Economic Recovery Tax Act of 1981, Pub. L. No. 97-34, 95 Stat 172, 173 (1981); see also Adam E. Szymanski, Make America Innovate Again: Construing Patent Box Proposals in view of a Policy Mix Approach, CYBARIS, 7 ISS. 2, at 250, 260 (2016).

² Robert D. Atkinson & Scott Andes, *Patent Boxes: Innovation in Tax Policy and Tax Policy for Innovation*, THE INFORMATION TECHNOLOGY & INNOVATION FOUNDATION 2 (Oct. 2011), http://www.itif.org/files/2011-patent-box.pdf.

³ Adam E. Szymanski, *supra* note 1, at 253.

⁴"A back-end incentive works near the end of the innovation cycle, when the IP has begun to generate income. This contrasts with "front-end" incentives, which work in the beginning of the innovation cycle, typically by incentivizing investment in research and development." Vedantika Bhagat, *Patent Box Regimes and Innovation Ecosystem*, at 2 ((2016).

⁵ Michael Stimmelmayr et al., Conference Paper, Is It Luring Innovations or Just Profit? The Case of European Patent Boxes, 1, 2 (2016),

https://www.econstor.eu/bitstream/10419/145582/1/VfS_2016_pid_6445.pdf.

⁶Patent boxes are sometimes referred to as "patent box regimes." See generally e.g., Sebastien Bradley et al., Cross-country Evidence on The Preliminary Effects of Patent Box Regimes on Patent Activity and Ownership, (Oct. 2015); Shannon Chen et al., The Effect of Innovation Box Regimes on Income Shifting and Real Activity 1 (July 2017), https://web.stanford.edu/~lnds/PB_7_10_17.pdf.

tax or no-tax jurisdictions.8 Observers are still realizing the effects of the patent boxes as their provisions continue to be adjusted. Nonetheless, they have been found, at least to some degree, to decrease profit shifting and increase employment and employee compensation.9 In 2013 and 2014, congressmen introduced legislation in the United States House of Representatives to create a patent box in the U.S., 10 but both of these proposed laws stalled in the House Committee on Ways and Means. 11 In 2015, Representatives Charles Boustany and Richard Neal circulated a draft piece of legislation proposing an innovation box, 12 but as of this writing, no innovation legislation sponsored by either representative has gone to a committee. 13 Around the same time, the Organization for Economic Cooperation and Development (OECD)14 developed proposals for how to address base erosion and profit shifting (BEPS), 15 which saw meaningful progress in the recent Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS (referred to as the MLI). 16 These events create three questions: (1) whether the U.S. should implement a patent box, (2) how a patent box ought to be implemented in the U.S., and (3) how international OECD agreements could affect how and when a patent box should be implemented in the U.S. This comment describes how implementing international tax reform in conjunction with a patent box is crucial to its success in the U.S. and in other countries, and how successful OECD agreements could accelerate the need of a patent box in the U.S. if it is to preserve its competitive R&D status. A prediction of the future of patent boxes and related policy recommendations will follow the description of these two elements and their implications.

span.org/congress/bills/bill/?112/hr6544 (last visited Sept. 1, 2017); see also H.R. 2605, C-SPAN, https://www.c-span.org/congress/bills/bill/?113/hr2605 (last visited Sept. 1, 2017).

⁸ Bradley et al., supra note 6, at 1.

⁹Chen et al., *supra* note 6, at 4.

¹⁰ H.R. 6544, 112TH CONGRESS. (2012); H.R. 2605, 113TH CONGRESS. (2013).

¹¹ See generally H.R. 6544, C-SPAN, https://www.c-

¹² Timothy M. Todd, *Lawmakers Release Innovation Box Discussion Draft*, Forbes (Jul. 31, 2015, 4:41 a.m.), https://www.forbes.com/sites/timtodd/2015/07/31/lawmakers-release-innovation-box-discussion-draft/#45539834685d. "An innovation box benefits forms of IP other than patents, such as trademarks."

 $^{^{13} \}mbox{See}$ generally current bills before Congress, https://www.congress.gov/ (last visited Sept. 1, 2017).

¹⁴ "The OECD is an international organization consisting of 35 member countries, which seeks to "help governments foster prosperity and fight poverty through economic growth and financial stability."" *What we do and how*, OECD,

http://www.oecd.org/about/whatwedoandhow/ (last visited Nov. 11, 2016); *Members and partners*, OECD, http://www.oecd.org/about/membersandpartners/ (last visited Nov. 11, 2016).

¹⁵ OECD releases final reports on BEPS Action Plan, ERNST & YOUNG GLOBAL LIMITED (Oct. 6, 2015), http://www.ey.com/GL/en/Services/Tax/International-Tax/Alert-OECD-releases-final-reports-on-BEPS-Action-Plan [hereinafter OECD Final Reports].

¹⁶ Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS, OECD, http://www.oecd.org/tax/treaties/multilateral-convention-to-implement-tax-treaty-related-measures-to-prevent-beps.htm (last visited Sept. 1, 2017).

Countries have modified existing patent boxes many times¹⁷ and will likely continue to do so in the future. Despite continual shortcomings, patent boxes have achieved modest effects at promoting innovation and job growth. ¹⁸ However, their successes have been limited due to the continuance of base erosion and profit shifting, mostly carried out by large multi-national entities.¹⁹

These practices can be quite effective. 20 In fact, the OECD estimated that the global community could be losing as much as \$240 billion a year due to profit shifting.²¹ American companies are particularly notorious, with the 500 largest U.S. firms having stashed over \$2 trillion in tax savings overseas.22 While the OECD has taken steps to carry out international action to prevent BEPS, 23 the international community has not yet implemented many of these steps.²⁴ Yet, it seems that international reform is resurgent, and that it should increase the efficacy of patent boxes. Absent important reform such as the OECD BEPS Action Plan, patent boxes will continue to only modestly increase innovation and job growth. Thus, the U.S. should hesitate to implement a patent box unless the international community has acted to significantly curtail base erosion and profit shifting. If, however, the international community enacts significant reform, it will noticeably shift global competition over corporate tax rates to one over patent box rates. While the actual effectiveness of the OECD's plans to fight BEPS is unclear, enough countries cooperating and enacting effective tax reforms will significantly reduce BEPS to the point where innovation boxes have a significant effect on where firms conduct business.

¹⁷ See Alex Miller, Boxed In? The U.K. Introduces a Modified Nexus Approach in Response to Critiques of Its Patent Box, BNA (Mar. 2, 2016), http://www.bna.com/boxed-U.K.-introduces-b57982068063/; Sebastien Bradley, et al., Dutch IP Regime with a 5% Effective Tax Rate, TAXAND (Jan. 28, 2010), http://www.taxand.com/taxands-take/news/dutch-ip-regime-5-effective-tax-rate [hereinafter Dutch IP Regime with a 5% Effective Tax Rate].
¹⁸ See Chen et al., supra note 6, at 4.

¹⁹ W.Wesley Hill, Patent Box as the New Innovation Incentive for the Several States: Lessons from Intellectual Property-Tax Competition, 42 AIPLA Q. J. 13, 14 (2014).

²⁰ The OECD states that "[r]evenue losses from BEPS are conservatively estimated at USD 100-240 billion annually, or anywhere from 4-10% of global corporate income tax (CIT) revenues." *Reforms to the international tax system for curbing avoidance by multinational enterprises*, OECD, http://www.oecd.org/tax/oecd-presents-outputs-of-oecd-g20-beps-project-for-discussion-at-g20-finance-ministers-meeting.htm (last visited Nov. 4, 2016) [hereinafter *OECD International Tax Reforms*].

²¹ Organization for Economic Co-operation and Development [OECD], *Background Brief Inclusive Framework on BEPS*, Jan. 2017, at 7.

²² New Rules, same old paradigm, THE ECONOMIST, https://www.economist.com/news/business/21672207-plan-curb-multinationals-tax-avoidance-opportunity-missed-new-rules-same-old (last visited Nov. 28, 2017) [hereinafter New Rules, same old paradigm].

²³ See OECD Final Reports, supra note 15; see also Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting, OECD, (Nov. 24, 2016) [hereinafter MLI].

²⁴ See generally, BEPS Country Scorecards, DELOITTE, https://www2.deloitte.com/global/en/pages/tax/articles/beps-country-scorecards.html (last visited Sept. 1, 2017).

In this scenario, the U.S. must implement a patent box to maintain the level of R&D and innovation taking place on its shores, as well as the high-quality and high-paying jobs that come with them. Further, it must implement one with provisions that are competitive with those of other countries in order to maintain its current level of R&D and innovation.

II. BACKGROUND

A. Base Erosion and Profit Shifting

Base erosion and profit shifting is a notorious worldwide problem, ²⁵ and can take different forms. ²⁶ The OECD defines BEPS as "tax avoidance strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations." ²⁷ These strategies allow firms to pay taxes to a country in which they have little or no involvement, ²⁸ while the country in which the firm performs most of its operations receives significantly reduced tax revenue from that firm. ²⁹ IP often plays a crucial role in this process because, unlike other forms of property, it is intangible and can be transferred easily between entities in different countries. ³⁰

Under the main strategy that firms use, companies directly sell under-valued IP to their subsidiaries, 31 who then charge them high licensing fees in return, reducing their profits in the parent country. 32 Here, in addition to its easy transferability, the uncertain value of IP also comes into play. This results from many factors, including "distinctiveness and the existence of perfect or imperfect comparables, project size, uncertainty surrounding the market size of the resulting product, and uncertainty over the useful life of platform contributions." 33 Transactional costs for all transfers of IP between related entities, either under U.S. tax law or OECD guidelines, use an "arm's length" standard, where the price paid for the use or purchase of IP is what the agreed-upon price would have been had the

²⁵ OECD International Tax Reforms, supra note 20.

²⁶ Another commonly used method to shift profits is the corporate inversion. *See* DONALD J. MARPLES & JANE G. GRAVELLE, CONG. RESEARCH SERV., R43568, CORPORATE EXPATRIATION, INVERSIONS, AND MERGERS: TAX ISSUES 3 (2016).

²⁷ Base erosion and profit shifting, OECD, http://www.oecd.org/ctp/beps/ (last visited Oct. 14, 2016).

²⁸ According to one source, there are over 10,000 "letterbox" firms, which have minimal or no physical presence, in the Netherlands alone. *Still Slipping the Net*, THE ECONOMIST, October 10, 2015, at 65.

²⁹ Stimmelmayr et al., *supra* note 5, at 1-2.

³⁰ Hill, *supra* note 19, at 24.

³¹ Lisa De Simone & Richard Sansing, *The Effect of Innovation Box Regimes on Income Shifting and Real Activity* 1, 3 (Stanford University, Working Paper No. 3452, 2017), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2516471.

³² Gilead Sciences: Price Gouger, Tax Dodger, AMERICANS FOR TAX FAIRNESS 12 (July 2016), http://www.americansfortaxfairness.org/files/ATF-Gilead-Report-Finalv3-for-Web.pdf.
³³ Simone & Sansing, supra note 31, at 21.

parties been unrelated when transacting.³⁴ Eventually, Congress became concerned that this arrangement allowed parents to sell IP to their subsidiaries for much less than its actual value.³⁵ After paying enough royalties to its subsidiary, the transaction could become a net loss for the parent (and hence a net gain for the subsidiary), helping it transfer its profits overseas and significantly reduce its tax base³⁶ in a high corporate tax country like the U.S.³⁷

Fortunately, the U.S. lessened this problem by creating so-called "super-royalty provisions" in the Internal Revenue Code Section 367(d). ³⁸ These provisions forced all firms to "recognize a super-royalty, i.e., an annual payment reflecting the economic productivity of the intangible, regardless of the actual consideration received." This helped limit the interpretation of the arm's-length value in some situations, making it harder for subsidiaries to charge inappropriately high licensing fees. ⁴⁰ The U.S. Congress adopted a similar mechanism in the Tax Reform Act of 1986, which established "commensurate with income" as the valuation standard for transferring licenses of intangibles. ⁴¹

Despite this, firms still found new ways to shift their profits to low-tax or no-tax jurisdictions. In one method, a parent and its subsidiary co-develop IP as part of a cost-sharing agreement (CSA).⁴² This removes the actual *transfer* of the IP from the scenario. Firms can thus avoid the Section 367(d) super-royalty provisions because they only apply to transfers of intangibles.⁴³

However, the value of IP is still important in the context of cost-sharing agreements, as an arm's-length valuation must still be used for these arrangements.⁴⁴ This allows firms to potentially understate the value of IP.

³⁴ Simone & Sansing, *supra* note 31, at 21.

³⁵ Stuart Webber, *IRS Proposed Transfer Pricing Regulations* 1, 4 (Copenhagen Research Group on International Taxation, Discussion Paper No. 2, 2009), http://coritacademic.org/wp-content/uploads/2011/12/IRS-Cost-Sharing-Regulations-2-1-version-2.pdf.

³⁶ AMERICANS FOR TAX FAIRNESS, *supra* note 32, at 12.

³⁷ Jason J. Fichtner & Adam N. Michel, *Don't Put American Innovation in a Patent Box: Tax Policy, Intellectual Property, and the Future of R&D*, MERCATUS CENTER AT GEORGE MASON UNIVERSITY (Dec. 7, 2015), http://mercatus.org/publication/don-t-put-american-innovation-patent-box-tax-policy-intellectual-property-and-future-rd.

³⁸ 26 USC §367(d) (2004).

³⁹ Hill, *supra* note 19, at 24.

⁴⁰ AMERICANS FOR TAX FAIRNESS, *supra* note 32, at 12.

⁴¹ Webber, *supra* note 35, at 4.

⁴² Hill, *supra* note 19, at 25.

⁴³ *Id*.

⁴⁴ See Xiaoying Zhang, Danny Ko, and Adam Karp, The Valuation of Intellectual Property for Transfer

Pricing Purposes, 8 LANDSLIDE, No. 1, Sept.-Oct. 2015, at 4,

 $http://www.americanbar.org/content/dam/aba/publications/landslide/2015-september-october/ABA_LAND_v008n01_the_valuation_of_intellectual_property_for_transfer_pricing_purposes.authcheckdam.pdf.$

In fact, the IRS accused Facebook of exactly this in 2016. ⁴⁵ These arrangements aren't surprising—one study found that "CSAs are more attractive as the ability of the [multinational corporation] to understate the value of the IP increases." ⁴⁶ In this case, the IRS argued that Facebook understated, by billions of dollars, the value of IP it had transferred to a low-tax subsidiary in Ireland. ⁴⁷ In May 2017, the case was assigned to Judge Pugh in the United States Tax Court. ⁴⁸

One common method of profit shifting is the "Double Irish" method. This method involves the parent company creating two subsidiaries, one in a low or no-tax jurisdiction, and another in Ireland. The parent then enters into a CSA with the low or no-tax subsidiary, allowing the subsidiary to use the IP without the parent fully transferring it, which would be taxed under current U.S. law. Under the terms of the CSA, the subsidiary, after paying a buy-in fee, can exploit the IP abroad. The low or no-tax subsidiary then licenses the IP to the Irish subsidiary and Ireland's low corporate tax rate applies to those transactions. With the IP transaction happening between two foreign subsidiaries, the U.S. does not receive corporate income tax from it. This process transfers IP created in the U.S. to other countries for further development and commercialization.

Of course, companies use this method in countries with low corporate tax rates other than Ireland. In fact, this process may become more prevalent. In 2014, Ireland announced that it will close the "Double Irish" loophole. Under the changes, all Irish-registered companies who are considered residents of another country will have until the end of 2020 to be registered as Irish residents. After the announcement, Ireland introduced a "Knowledge Development Box," designed to comply with OECD

⁴⁵ Simone & Sansing, supra note 31, at 11.

⁴⁶ Id at 25.

⁴⁷ Lynnley Browning & Kartikay Mehrotra, *IRS Takes Facebook to Court, Signaling Start of Tougher Approach*, BLOOMBERG (July 8, 2016, 5:00 AM), https://www.bloomberg.com/news/articles/2016-07-08/irs-takes-facebook-to-court-signaling-start-of-tougher-approach.

⁴⁸ Facebook & Subsidiaries v. Comm'r, No. 21959-16 (U.S. Tax Court, May 22, 2017).

⁴⁹ Hill, *supra* note 19, at 22.

⁵⁰ Id.

⁵¹ *Id*.

⁵² *Id*.

⁵³ *Id.* at 23.

⁵⁴ *Id.* In some cases, the Double Irish also uses a shell Dutch subsidiary, dubbed a "Dutch Sandwich." *See, e.g.*, Jeremy Kahn and Martijn van der Starre, *Google Used 'Dutch Sandwich' to Lower 2015 Taxes by \$3.6B*, BLOOMBERG (Dec. 21, 2016, 10:25 AM), https://www.bloomberg.com/news/articles/2016-12-21/google-lowered-2015-taxes-by-3-6-billion-using-dutch-sandwich.

⁵⁵ Sam Schechner, *Ireland to Close 'Double Irish' Tax Loophole*, WALL ST. J. (Oct. 14, 2014, 4:48 PM), http://www.wsj.com/articles/ireland-to-close-double-irish-tax-loophole-1413295755.

⁵⁶ *Id*.

guidelines, which results in a 6.25% tax rate on qualified production. ⁵⁷ Many saw this as a way to maintain investment following the imminent end of the Double Irish. ⁵⁸

In a slightly different scenario, a parent and a subsidiary can also enter into an agreement where both the parent and the subsidiary contribute IP, and the two entities split the profits related to it.⁵⁹ This is called the Residual Profit Split Method (RPSM).⁶⁰ Under this method, both the parent and the subsidiary retain the rights to the IP that they contributed to the agreement.⁶¹

The RPSM is one of several transactional pricing methods used to calculate a supposed arm's length price for intellectual property transactions under U.S. law. ⁶² Other methods include the comparable uncontrolled transaction (CUT) method, the comparable profits method (CPM), the comparable profit split method, and unspecified methods. ⁶³ The CUT method in particular is vulnerable to manipulation because it allows entities to use comparable transactions to support the price, which can be used to distort the true price. ⁶⁴ Of course, companies always run the risk of getting called out on potential manipulations. ⁶⁵

B. The OECD BEPS Action Plan and Treaty

In 2013, the OECD put forward an action plan containing 15 different actions that the global community should pursue to address the problem of BEPS.⁶⁶ For example, Action 5 appears to target the Double Irish and similar systems, as it specifies that international rules "need to be adapted to prevent BEPS that results from the interactions among more than two countries and to fully account for global value chains."⁶⁷ Action 8,

⁵⁷ Charlie Taylor, *OECD tax director cautions against patent box tax incentives*, THE IRISH TIMES (Mar 10, 2016, 10:08 AM), http://www.irishtimes.com/business/economy/oecd-tax-director-cautions-against-patent-box-tax-incentives-1.2567501.

⁵⁸ Id.

⁵⁹ Simone & Sansing, *supra* note 31, at 5-6.

⁶⁰ *Id*. at 5.

⁶¹ *Id*. at 6.

⁶² See 26 C.F.R. § 1.482–4(a); see also Peter O. Larsen et al., Transfer pricing in the United States: overview, THOMSON REUTERS (May 1, 2017), https://uk.practicallaw.thomsonreuters.com/w-006-

^{9130?}transitionType=Default&contextData=(sc.Default).

⁶³ Larsen et al., *supra* note 62 at 8.

⁶⁴ See Xiaoying Zhang et al., supra note 44 at 3.

⁶⁵ For an example of a tax court finding a company's comparable analysis to be inadequate to support an arm's length transaction price, see *Medtronic, Inc. v. Comm'r of Internal Revenue*, 111 T.C.M. (CCH) 1515 (T.C. 2016).

⁶⁶ ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, Action Plan on Base Erosion and Profit-Shifting, 1-40 (2013), http://www.oecd.org/ctp/BEPSActionPlan.pdf.
⁶⁷ Id. at 18.

another important provision, is directed at ensuring that IP valuation is accurately correlated with value creation. ⁶⁸

In 2015, the OECD issued a report regarding each action with specific proposals for how each should be addressed.⁶⁹ The report on Action 2 in particular targets preventing the use of the Double Irish mechanism by changing domestic laws and international treaties⁷⁰ to treat hybrid firms⁷¹ differently and thus preserve each country's tax base. 72. A hybrid firm is one that is viewed as taxable under one country's laws but not under another's. 73 Other Actions, such as Action 12, have a broader approach. The report on Action 12 recommends mandatory disclosure rules designed to increase transparency and deter the use of aggressive BEPS practices, which "have a material tax revenue risk in the reporting jurisdiction." ⁷⁴ Promisingly, the reports on Actions 8-10 involved concrete recommendations for how to address the valuation problems caused by intangibles, including new guidance on determining arm's-length pricing and a recommendation for allowing tax administrators to value intangibles based on ex post evidence, which has some similarities to the U.S. standard of "commensurate with income."⁷⁵

Even though supporters of the plan are optimistic, ⁷⁶ some believe that the OECD's plan has flaws, especially the continuance of the "independent entity" principle. ⁷⁷ This principle holds that a parent's subsidiary must be treated as a separate entity that transacts independently with the parent at arm's-length. ⁷⁸ Some have argued that because the ability to transfer undervalued IP is a central aspect behind the Double Irish and other systems, a parent and subsidiary cannot be treated as dealing at arm's-length. ⁷⁹ Some have criticized the plan for having other shortcomings as well, such as the lack of a strategy to address online sales and interest deductions. ⁸⁰ Moreover, the changes mentioned in the report are only recommendations that have no binding authority, ⁸¹ and only new international treaties or domestic laws can lead to substantive change. This has led to a fear that "[i]f co-ordination is weak, unilateral measures…could

⁶⁸ OECD Action Plan, supra note 66, at 20.

⁶⁹ OECD Final Reports, supra note 15, at 1.

⁷⁰ *Id*. at 3.

 $^{^{71}\,\}mathrm{A}$ hybrid firm is one that is viewed as taxable under one country's laws but not under another's.

⁷² OECD Final Reports, supra note 15, at 3.

⁷³ See Bob Kiggins, BEPS-Double Irish/Dutch Sandwich Hybrid Entity Mismatches – Part I of II, Culhane Meadows PLLC (Oct. 13, 2015), http://www.culhanemeadows.com/beps-double-irish-dutch-sandwich-hybrid-entity-mismatches-part-i-of-ii/.

⁷⁴ OECD Final Reports, supra note 15.

⁷⁵ Id

⁷⁶ See New Rules, same old paradigm, supra note 22.

^{&#}x27;' Id.

⁷⁸ See Id. ⁷⁹ See Id.

⁸⁰ See Id.

⁸¹ See OECD Final Reports, supra note 15.

accelerate as...countries rush to protect their tax bases."82 Despite the uncertainty, the introduction of patent boxes, as well as a new international treaty, may cause firms to reconsider their BEPS methods of tax saving.

C. Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS (MLI)

After years of discussion and proposals, 68 countries signed the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting on June 7, 2017. 83 Since then, Mauritius, Nigeria, and Cameroon have also signed the treaty, and Côte d'Ivoire, Estonia, Jamaica, Lebanon, Panama, and Tunisia have expressed intent to sign it. 84 The treaty addresses Actions 2, 6, 7, 14, and 15 of the OECD's BEPS Action Plan. 85 In particular, it focuses on implementing part of the OECD's BEPS Action Plan by providing a mechanical framework to amend existing Covered Tax Agreements (CTAs) to agree with the Action Plan. 86

Current signatories are expected to amend over 1,100 tax treaties using the MLI, presumably beginning in early 2018.⁸⁷ This number includes 85% of the treaties between the signatories, ⁸⁸ who chose which CTAs to schedule for adjustment under the MLI, and who can add more after signing. ⁸⁹ Additionally, signatories can opt out of many parts of the treaty, though after ratifying, they cannot add or broaden their opt-outs. ⁹⁰

⁸² New Rules, same old paradigm, supra note 22.

⁸³ See Ground-breaking multilateral BEPS convention, OECD (Jun. 6, 2017), http://www.oecd.org/ctp/treaties/ground-breaking-multilateral-beps-convention-will-close-tax-treaty-loopholes.htm.

⁸⁴ See Signatories and Parties to the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS, OECD (Aug. 17, 2017), http://www.oecd.org/tax/treaties/beps-mli-signatories-and-parties.pdf [hereinafter Signatories and M.D.]

to MLI].

85 See Signing by 68 jurisdictions of the Multilateral Convention to Implement Tax
Treaty Related Measures to Prevent BEPS, ERNST & YOUNG GLOBAL LIMITED (Jun. 14, 2017), http://www.ey.com/gl/en/services/tax/international-tax/alert--signing-by-68-jurisdictions-of-the-multilateral-convention-to-implement-tax-treaty-related-measures-to-prevent-beps-highlights-impacts-for-business-to-consider [hereinafter Signing of MLI].

⁸⁶ See Id.

⁸⁷ See Id.

⁸⁸ See KPMG analysis: Multilateral instrument implementing the treaty-related BEPS provisions, KPMG INTERNATIONAL COOPERATIVE (Jun. 9, 2017), https://home.kpmg.com/xx/en/home/insights/2017/06/tnf-kpmg-analysis-mli-implementing-treaty-related-beps.html.

⁸⁹ See Id.

⁹⁰ See Signing of MLI, supra note 84.

D. The Creation and Development of Patent Boxes

Patent boxes, or the broader innovation boxes, ⁹¹ first emerged in France in 2000, ⁹² and since then have taken slightly different forms and have undergone significant changes. ⁹³ Patent boxes have three goals: (1) to "retain mobile income that is otherwise shifted out of the country to lower-tax jurisdictions and possibly attract mobile income from higher-tax jurisdictions," (2) to "increase innovation within a country," and (3) to "increase the amount of real economic activity (e.g., jobs) within a country."⁹⁴ To a limited extent, patent boxes have accomplished some of these goals.

Patent box parameters can vary quite a bit from country to country. One of the central parameters is which types of intellectual property can be linked to patent box-eligible profits, resulting in a reduced effective tax rate. The types of IP eligible under different IP regimes can differ. Pregimes that apply only to patents are typically called "patent boxes," whereas other IP regimes that include other types of IP, such as trademarks, are often termed "innovation boxes." Luxembourg, for example, has an IP box that includes many different types of intellectual property, including patents, trademarks, designs, and software copyrights. Other countries, like the Netherlands and the U.K., have more limited boundaries on eligible IP. The Netherlands limits eligible IP to only "patents and all innovations and activities to which R&D declaration is issued." The U.K. system is more of a true patent box, as its definition of eligible IP only extends to "patents or supplementary protection certificates."

Another essential parameter is the effective tax rate on innovation box eligible profits. These tax rates can vary, with many being in the range of five to fifteen percent. 101 A handful of patent box countries have even lower rates, such as Cyprus and Liechtenstein, who have patent box rates of only 2.5%. 102

Many countries also consider when the entity created its IP. In the regimes of the U.K., Cyprus, and France, it is irrelevant whether the patent

⁹¹ See Hill, supra note 19, at 34; see also Bradley et al., supra note 6, at 1 n.1.

⁹² See Bradley et al., supra note 6, at 11.

⁹³ See Miller, supra note 17; see also Dutch IP Regime with a 5% Effective Tax Rate, supra note 17.

⁹⁴Chen et al., *supra* note 6, at 1.

⁹⁵ See e.g., Joint Economic Committee, Patent Boxes: A Brief History, Recent Developments, and Necessary Considerations, at 5 (2016).

⁹⁶ Scott DeAngelis, If You Can't Beat Them, Join Them: The U.S. Solution to the Issue of Corporate Inversions, 48 VAND. J. TRANSNAT'L L. 1353, 1367 (2015).

⁹⁷ See Hill, supra note 19, at 33-34; Bradley et al., supra note 6, at 1 n.1.

⁹⁸ See DeAngelis, supra note 96, at 1371.

⁹⁹ *Id.* at 1371-72.

¹⁰⁰ See Id. at 1372.

¹⁰¹ See Id. at 1367.

 $^{^{102}}$ Bradley, supra note 6, at Table 1.

was created after the patent box was implemented. 103 This means that some firms can reap the benefits from their existing patent portfolios without developing IP in the present. 104

Some patent boxes require that the business undertake "substantial economic activities related to the innovation...in the country offering the favourable tax regime, thereby linking the tax benefit directly to R&D expenditures." This is known as a nexus approach. The Irish patent box initially used this approach, but in 2007 the European Commission found that this provision violated the European Community Treaty¹⁰⁷, which has articles that protect "freedom of establishment and free movement of services."108 This changed after a non-nexus requirement patent box was initiated in the U.K.¹⁰⁹ While having the same goals as other patent boxes, the U.K. patent box "appear[ed] to have had the consequence of freeloading off those tax jurisdictions where R&D budgets are spent and where R&D departments (and their workers) are based."110 In response to this criticism, the U.K. made plans to implement a nexus-based approach, which complies with Action 5 of the OECD BEPS Action Plan. 111 Under the new approach taken by the U.K. patent box, the amount of IP-connected profits receiving the discounted tax rate will be decreased by: (1) the proportion of patentrelated R&D outsourced to others, and (2) any IP acquired from another entity (thus, developed externally to the company seeking a patent box rate).112

E. Attempts to Start a U.S. Patent Box

At least 14 countries, the majority of which are in Europe, have adopted patent boxes, 113 but more countries around the world are adopting them. 114 It comes as no surprise that in recent years, legislators have proposed legislation to create one in the United States. Nonetheless, a patent

http://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/gen_info/economic_analysis/tax_papers/taxation_paper_57.pdf.

¹⁰³ Annette Alstadsæter et al., Patent Boxes Design, Patents Location and Local R&D 8-9 (European Commission, Working Paper N. 57, 2015),

¹⁰⁴ Id.

¹⁰⁵ See Stimmelmayr et al., supra note 5, at 2.

¹⁰⁶ *Id*.

¹⁰⁷ Press Release, European Commission, Direct taxation: Commission requests Ireland to end discriminatory rules on tax treatment of patent royalties (Mar. 23, 2007), http://europa.eu/rapid/press-release_IP-07-408_en.htm?locale=en.

 $^{^{108}\,}Id.$

¹⁰⁹ Miller, supra note 17.

¹¹⁰ *Id*.

¹¹¹ *Id.*; Bradley et al., *supra* note 6, at 7.

¹¹² Miller, *supra* note 17.

¹¹³Bradley, *supra* note 6, at 1.

¹¹⁴ See generally, Gaéten de Rassenfosse, Patent box policies, Australian Government, Department of Industry, Innovation and Science, Office of the Chief Economist 1 (Nov. 2015), http://www.industry.gov.au/Office-of-the-Chief-Economist/Publications/Documents/Patent-Box-Policies.pdf.

box bill, initially proposed in 2012,¹¹⁵ and then modified and re-proposed in 2013,¹¹⁶ still has not been presented in front of a committee.¹¹⁷

The proposed law operates somewhat differently from similar legislation in countries with existing patent boxes. The bill stipulates that a company can receive a deduction of 71% of its "patent box profit," rather than a discounted tax rate on corporate profits related to patents. ¹¹⁸ This has the effect of creating a discounted tax rate on profits tied to patents, yielding an effective rate of 10.15%. ¹¹⁹ The legislation defines patent box profit as the IP profit of the company, multiplied by the ratio of the company's 5-year R&D expenditure in the U.S. over its total costs. ¹²⁰

III. ANALYSIS

A. Preliminary Effects of Patent Boxes

While as of this writing the U.S. has not implemented a patent box, looking at regimes in other countries can provide insight into the effects (or lack thereof) that such a regime might have in the U.S. Some studies have shown modest positive effects. For example, a 2014 study found that "tax incentives subsidizing the income stream from successful innovation increase both quantity *and* quality [of R&D.]"¹²¹ These effects on R&D seem to point to at least limited success, given that increased R&D is a typical goal of patent boxes. ¹²²

Regarding profit-shifting, some studies have found "some evidence that firms shift less income out of relatively high-[corporate] tax innovation box countries relative to pre-innovation box and non-innovation box country-years." This indicates that the U.S., having one of the highest corporate tax rates in the world, 124 could stand to benefit from an innovation or patent box more than some of its low-corporate-tax neighbors.

While some claim that the evidence does not necessarily support patent boxes increasing job growth, ¹²⁵ some, such as researchers at the Brookings Institution, have observed clear linkages between patents and economic output. In a 2013 study, these researchers found that one standard

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H.R. 2605, supra note 11.
H.R. 6544, supra note 11.
H.R. 2605, supra note 10; Fichtner & Michel, supra note 37.
Fichtner & Michel, supra note 37.
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115 H.R. 6544, supra note 11.

¹²⁰ H.R. 2605, *supra* note 10.

Bradley et al., *supra* note 6, at 2.

¹²²Chen et al., *supra* note 6, at 1.

¹²³ *Id.* at 3, 14, 23.

¹²⁴ Fichtner & Michel, *supra* note 37, at 1.

¹²⁵ See Kim Dixon, *Innovation tax break gaining some support in Congress*, REUTERS (Aug. 3, 2012, 3:57 PM), https://www.reuters.com/article/us-usa-taxes-patentboxes/innovation-tax-break-gaining-some-support-in-congress-idUSBRE8721HV20120803.

deviation in patent growth in U.S. metropolitan areas led to an average 2.7% increase in GDP per worker, which just edged out bachelor's degree attainment rate, which had a 2.5% effect. They also found that areas with high annual patent growth had much better annual job growth rates, with high patent growth metro areas having a 1.9% average annual growth in jobs, compared to just 0.5% for low patent growth areas. 127

Others have found correlations between patent boxes and increased patent filings, which would conceivably produce some of these positive economic effects. For example, a study by Alstadsæter and others found that patent boxes increase the likelihood of a firm to register a patent in a country. The research observed large changes, which indicated that "for each percentage point reduction in the corporate income tax rate thanks to the patent box, the likelihood of registering a patent in the country concerned will rise by 10.4%, 7.6% and 17.5% for the pharmaceutical, [information and communication technology], and car industries, respectively." However, this study used data from 2000-2011, when nexus requirements were less prevalent. Therefore, these percentages will likely fall as countries continue to implement nexus requirements.

Despite this data, others have observed that the positive effects of patent boxes seem to be limited in terms of which firms they affect. One study found that "the implementation of a patent box regime increases the responsiveness of patent activity to tax rates on patent income, though this effect appears to be confined to patents for which the inventors and patent owners are located in the same host country." The Alstadsæter study confirmed this, finding statistical results that "suggest that the tax advantage linked to the patent box does decrease the probability of moving inventors to the patent box country." However, the same study acknowledged that "the presence of a [nexus requirement] has a strong effect in reversing this tendency." 133

Perhaps even more troubling, others say that patent boxes are not changing the motives of companies to shift profits in order to take advantage of the low or non-existent corporate tax in some jurisdictions. While patent boxes have generated revenue, "it does not appear that patent box regimes have dramatically altered the broader set of tax motives for allocating patent income to low-tax countries." ¹³⁴ Even when observers saw

¹²⁶Rothwell et al., Patenting Prosperity: Invention and Economic Performance in the United States and its Metropolitan Areas 15-16 (the Brookings Institution, 2013), https://www.brookings.edu/wp-content/uploads/2016/06/patenting-prosperity-rothwell.pdf.

¹²⁷ *Id.* at 19, Table 7.

¹²⁸ Alstadsæter et al., *supra* note 103, at 12.

¹²⁹ *Id*.

¹³⁰ *Id.* at 18.

¹³¹Bradley, et al., *supra* note 6, at 4.

Alstadsæter et al., *supra* note 103, at 17.

¹³³ *Id*.

¹³⁴Bradley et al., *supra* note 6, at 4.

reductions of subsidiary profits in low tax jurisdictions, the effect was small. Confirming this, another study found that when the analysis was limited to newly created IP, increases in pre-tax profits for firms in patent box countries disappeared. This seems to support comments made by other authors, who believe that [as] long as patents held in tax havens continue to face lower tax rates on patent income, havens may nevertheless remain relatively attractive, however, and hence the net effect on patent activity and ownership reattributions is ambiguous." 137

B. Arguments Against a Patent Box in the U.S.

Despite data showing the albeit limited, success, of patent boxes, ¹³⁸ others believe that the data is insufficient to substantiate the positive effects of patent boxes, or that the costs of such a patent box in the U.S. would outweigh the benefits. ¹³⁹ Two Fellows from the Mercatus Center at George Mason University, for example, say that "[t]he academic literature suggests that a patent box will not improve measures of job creation, innovation, or tax revenue." ¹⁴⁰ They argue that patent boxes only further complicate the tax code, which can "slow economic growth," ¹⁴¹ and that an across-the-board decrease in the U.S. corporate tax rate would be a better approach. ¹⁴² Curtis Dubay and David Burton make a similar argument, and further argue that a patent box favors firms with higher levels of R&D, which "picks winners and losers through the tax code and is anathema to tax reform." ¹⁴³

The U.S. tax code is complex, and implementing a patent box will possibly further complicate it. However, implementing some of the OECD's recommendations would likely involve simplifying some aspects of tax code, such as the treatment of hybrid mismatches, 144 which could offset any added complexity. While patent boxes may pick winners and losers, this is a necessary "evil" if the U.S. is to prevent R&D from leaving its shores. As the U.S. Congress Joint Economic Committee recently stated, there is

¹³⁵ One study found only a 2% post-patent box reduction in profits reported by subsidiaries in a jurisdiction with a lower corporate tax rate than the parent. Stimmelmayr et al., *supra* note 5, at 17.

¹³⁶ *Id*. at 3.

Bradley et al., *supra* note 6, at 9.

¹³⁸Chen et al., *supra* note 6, at 4.

¹³⁹ Fichtner & Michel, *supra* note 37, at 3; *see* Curtis S. Dubay & David R. Burton, *Boustany-Neal Innovation Box: Complex and Unsound Policy*, THE HERITAGE FOUNDATION (Sept. 9, 2015), http://www.heritage.org/research/reports/2015/09/boustanyneal-innovation-box-complex-and-unsound-policy.

¹⁴⁰Fichtner & Michel, *supra* note 37, at 1.

¹⁴¹ *Id.* at 2.

¹⁴² *Id.* at 4.

¹⁴³ Dubay & Burton, supra note 140.

¹⁴⁴ Action 2 of the Plan specifically addresses this. *OECD Final Reports*, *supra* note 15.

"concern among U.S. lawmakers who fear that profitable R&D and manufacturing activities will soon flee to jurisdictions with patent boxes." ¹⁴⁵

Other academics believe that existing tax incentives in the U.S. that focus on encouraging R&D are adequate, and should not be supplemented with a patent box. 146 Adam Szymanski believes that the current U.S. R&D tax incentives are more appropriate for encouraging innovation and that "patent boxes may encourage profit at the expense of innovation."147 He claims that "it is likely more beneficial to subsidize frontend activity" (via R&D tax incentives, for example,) "than it is to subsidize back-end activity" (such as a patent box). 148 This argument seems to run counter to collected data, which shows that patent boxes can have limited positive effects in current tax policy environments. 149 Moreover, this data will likely yield more positive results for local production once more countries within the sample implement nexus requirements. And it should not be forgotten that patent applications in and of themselves generate revenue via filing fees and other expenses, which applicants ultimately pay to the government. 150 If the U.S. Congress implements a patent box, it would be wise for its members to examine the existing patent boxes in other countries, in order to ensure that such a system is sensibly carried out.

C. Necessary Features of a U.S. Patent Box

The European Commission initially rejected the nexus approach used in Ireland, ¹⁵¹ but later regretted this as it observed the over-generous nature of the non-nexus approach taken in the U.K. ¹⁵² The European community realized that this approach "attract[ed] patents created through innovative activity conducted elsewhere than the final country of registration." ¹⁵³ This approach was unacceptable to many, who said that it created the "consequence of freeloading off those tax jurisdictions where R&D budgets are spent and where R&D departments (and their workers) are based." ¹⁵⁴ As a result, the U.K. added a nexus approach to its patent

¹⁴⁵ JOINT ECONOMIC COMMITTEE, *supra* note 95, at 4.

¹⁴⁶ Szymanski, *supra* note 1, at 271-72.; Fichtner & Michel, *supra* note 37, at 3.

¹⁴⁷ Szymanski, *supra* note 1, at 272.

¹⁴⁸ *Id*.

 $^{^{149}}$ Alstadsæter et al., supra note 103, at 16; Bradley et al., supra note 6, at 2; Chen et al., supra note 6, at 23.

¹⁵⁰ In the United States, the United States Patent and Trademark Office receives these fees, and (for the most part) uses them to fund its operations, thus preventing the raising of revenue elsewhere. In some circumstances, Congress has even used some of these funds to finance other parts of the federal budget, something called "fee diversion." See, Brian O'Shaughnessy, *Diversion of USPTO User Fees is a Tax on Innovation*, IPWATCHDOG (Mar. 17, 2016), http://www.ipwatchdog.com/2016/05/17/diversion-uspto-user-fees-tax-innovation/id=69070/.

¹⁵¹ Press Release, European Commission, *supra* note 107.

¹⁵² Stimmelmayr et al., *supra* note 5, at 2.

¹⁵³ Id

¹⁵⁴ Miller, *supra* note 17.

box, a requirement that took effect for all patents applied to the patent box after June 30, 2016.¹⁵⁵ Unsurprisingly, in the final reports the OECD issued regarding its BEPS Action Plan, Action 5 specifically addressed this by recommending a nexus approach with a limited grandfather period.¹⁵⁶

As observed in European iterations of patent boxes, a successful patent box requires a nexus approach. ¹⁵⁷ The nexus requirement ensures that the incentive to benefit from a patent box in a country is aligned with the cost of engaging in related R&D in that same country. This would be true in the U.S. as well. However, the U.S. should make sure that any patent box tax reductions do not overlap with existing R&D tax incentives, in order to prevent firms from double-dipping on tax benefits.

To remain competitive on the global patent box market, the U.S. needs to create a patent box with a tax rate that is close to that of many of the European patent box countries—likely a rate between 10-15%, ¹⁵⁸ significantly less than the current 35% corporate tax rate in the U.S. 159 The economic benefits of conducting business in the U.S. are significant, ¹⁶⁰ and the costs associated with R&D activities, and more especially moving them to another country, can be significant as well. 161 Therefore, even a patent box rate slightly greater than 15% may be sufficient to incentivize a large portion of firms to maintain their R&D in the U.S., particularly for firms are already performing those operations there. This competitive patent box rate is necessary for the U.S. to compete with many European countries, which firms may find comparably attractive for their operations. 162 Congress seems to be aware of this, given that one of the latest attempts at patent box legislation in the U.S. would have set a very competitive effective patent box rate of 10.15%. 163 Both before and after implementing a patent box, the U.S. will need to stay apprised of global developments related to patent boxes and plans to counteract BEPS to make certain that the patent box remains competitive.

¹⁵⁵ Miller, supra note 17.

¹⁵⁶ OECD Final Reports, supra note 15.

¹⁵⁷ Miller, *supra* note 17.

¹⁵⁸ DeAngelis, *supra* note 96, at 1383. ¹⁵⁹ *Id.*

¹⁶⁰ *Id*.

¹⁶¹ For example, in 2016, Japanese pharmaceutical company Takeda decided to end its operations in the U.K. and concentrate its efforts in the United States and Japan. Its executives said that the move would cost \$725 million. See, John Carroll, *Takeda overhauls R&D*, focusing on Boston and Japan in global reorganization, ENDPOINTS NEWS (July 29, 2016, 4:42 PM), https://endpts.com/takeda-overhauls-rd-focusing-on-u-s-and-japan-ops/.

¹⁶² Ireland for example, has been labeled as attractive to the pharmaceutical industry because it has "a low corporate tax, a strong industry presence, a legal infrastructure similar to that of the United States, and an increasingly competent workforce." See, DeAngelis, *supra* note 96, at 1372.

¹⁶³ Fichtner & Michel, *supra* note 37, at 3.

D. International Fight Against BEPS Could Elevate the Importance of a U.S. Patent Box

If the OECD reforms curb BEPS, companies may look to other methods of tax savings, including patent boxes. If this happens, the U.S. could see IP development move to other countries. To stay competitive, the U.S. will need to implement a patent box of its own, one that ought to have a nexus requirement. Not only would this make practical sense for the U.S., but a nexus requirement is also the approach agreed on in the final report on Action 5 of the OECD BEPS Action Plan. 164 While the Action Plan does not bind any nation, if the U.S. were to implement a patent box without a nexus requirement, it would likely face intense international pressure to add one, as the U.K. experienced. 165

Even with the details of BEPS solutions still being worked out on the international stage, the patent boxes in Europe have already caused some companies to move their R&D activities. For example, GlaxoSmithKline, a pharmaceutical company, announced intentions of moving R&D operations to the U.K. in order to take advantage of its patent box. ¹⁶⁶ The nexus approach likely played an important role in incentivizing GlaxoSmithKline to move. Without this requirement, a patent box creates little incentive for firms to move R&D operations (and the economic growth that accompanies them).

If international efforts can sufficiently decrease current BEPS practices, the use of patent boxes as a method of tax savings will increase. In fact, in 2013, Apple Inc. ("Apple") testified that the elimination of cost-sharing agreements between parents and foreign subsidiaries would lead to the migration of R&D from the U.S. to other countries. ¹⁶⁷ It is worth noting that Apple has good reason to preserve the cost-sharing agreements, as one allowed Apple to shift earnings to a subsidiary in Ireland, which saved the corporation approximately \$1.9 billion per year. ¹⁶⁸

The implementation of the OECD BEPS Action Plan is far from complete, ¹⁶⁹ and the effort has encountered speedbumps with non-OECD countries. ¹⁷⁰ Nevertheless, the threat of enhancing corporate tax disclosures, contained in Action 12, ¹⁷¹ is already changing company behavior. ¹⁷²

¹⁶⁴ OECD Final Reports, supra note 15.

¹⁶⁵ Miller, supra note 17; Bradley et al., supra note 6, at 7, n.9.

¹⁶⁶ Szymanski, *supra* note 1, at 258-59.

¹⁶⁷ Simone & Sansing, *supra* note 31, at 6.

¹⁶⁸ *Id.* at 11.

¹⁶⁹ See generally, DELOITTE, supra note 24.

¹⁷⁰ OCED continues BEPS implementation, amends Transfer Pricing Guidelines; EU adopts CbC report exchange rules, 3 (July 21, 2016),

https://www.pwc.com/gx/en/tax/newsletters/pricing-knowledge-network/assets/pwc-TP-OECD-BEPS-implementation-update.pdf.

OECD Final Reports, supra note 15, at 12.

New Rules, Same Old Paradigm, supra note 22.

Amazon, for example, has opened new branches in Europe and has stopped diverting its profits to relatively low-tax Luxembourg. ¹⁷³ In another instance, a director of the Luxembourgian segment of an international bank even admitted that it would waive a favorable tax ruling—in order to achieve a higher effective rate—because it feared the negative publicity that might result from only paying 15% of its profits in taxes. ¹⁷⁴ If the mere threat of disclosure can cause these kinds of changes, the effects of actually forcing corporate tax transparency would be significant.

The implementation of the OECD BEPS Action Plan will force at least some firms to look for other methods of tax savings, and one of these will certainly be the patent box. This will especially be true for those firms with large IP portfolios, who will have a stronger incentive to use it. As international reforms begin to affect firms, many will leave tax havens and look for other ways of reducing their tax rates, and the patent box will surely be one of them. If the United States does not prepare itself for this scenario by having a patent box of its own, it will lose high quality R&D jobs and investment to other countries.

E. Low Rate Tax Havens Still More Appealing to Some Than Patent Boxes

Only widely implemented plans to curb BEPS will cause significant changes. Incremental steps on the domestic level will only cause firms to shift their tax strategies to involve new countries and/or new methods. For example, some have pointed out that after the imminent end of the "Double Irish," irrs firms will likely move their Irish-registered non-Irish-resident subsidiaries to Malta. This is possible because the Irish law purporting to end the Double Irish has not negated a treaty that Ireland has with Malta, which would allow the Irish-registered company to classify as a Maltese resident. This set-up could favor companies seeking to continue shifting profits because: (1) Malta does not tax IP royalties, and (2) Malta is a member of the EU. Therefore, royalties paid from an Irish tax resident to an Irish-registered Maltese resident "reportedly have not been subject to Irish withholding tax."

¹⁷³New Rules, Same Old Paradigm, supra note 22.

¹⁷⁴ *Id*.

¹⁷⁵ See generally Schechner, supra note 55.

¹⁷⁶ Bob Kiggins, BEPS-Double Irish/Dutch Sandwich Hybrid Entity Mismatches – Part II of II, CULHANE MEADOWS PLLC (Jan. 21, 2016), http://www.culhanemeadows.com/7098-2/

¹⁷⁷ **I**d

¹⁷⁸*Id*.

¹⁷⁹*Id*.

allow Malta to replace popular low or no-tax havens such as Bermuda or the Cayman Islands. 180

In addition to these complications, many are skeptical of the MLI. While it showcases many countries coming together to fight against BEPS, more than half of the signatories, including China, Ireland, and the UK, have opted out of the Article 12 of the Treaty, 181 which relates to standards governing how a dependent agent can create a permanent establishment. 182 Moreover, low corporate tax countries such as Bermuda and the Cayman Islands have yet to sign the treaty, ¹⁸³ despite being members of the Inclusive Framework. 184 Perhaps hampering international tax reform efforts even further, the U.S. still has not signed the MLI. 185

Some think that even if the OECD countries do not implement its plan, or do not implement it well, the U.S. needs to join the other countries and create a patent box. 186 As one person put it, "[i]f the [OECD] agreement is not sufficiently structured or fails to be implemented," the U.S. should implement a patent box. 187 But, as others have pointed out, "[s]o long as patents held in tax havens continue to face lower tax rates on patent income, havens may nevertheless remain relatively attractive."188 While true, this assumes that firms can continue transferring their IP to subsidiaries on terms that produce worthwhile profit reduction for the parent. These transfers could of course be curtailed by widely-implemented international taxing standards. In the absence of such reform, however, data has shown that patent boxes have only very limited positive effects on R&D in patent box countries. 189 And, as others have pointed out, "[t]he prevalence of new patent applications featuring a cross-border reattribution of patent ownership...appears largely insensitive to patent box."190 Therefore, "it does not appear that patent box regimes have dramatically altered the broader set of tax motives for allocating patent income to low-tax countries."191

¹⁸⁰ See Double Irish/Dutch Sandwich Part I, supra note 73; Simone & Sansing, supra note 31, at 10-11; DeAngelis, supra note 96, at 1369-70.

¹⁸¹ KPMG Analysis: Multilateral Instrument Implementing the Treaty-Related BEPS Provisions, KPMG INTERNATIONAL COOPERATIVE (Jun. 9, 2017),

https://home.kpmg.com/xx/en/home/insights/2017/06/tnf-kpmg-analysis-mli-implementingtreaty-related-beps.html.

182 *Id*.

¹⁸³ Signatories to MLI, *supra* note 83.

¹⁸⁴Members of the Inclusive Framework on BEPS Composition, OECD (Jul. 6, 2017), http://www.oecd.org/tax/beps/inclusive-framework-on-beps-composition.pdf.

¹⁸⁵ Signatories to MLI, supra note 83.

¹⁸⁶ DeAngelis, *supra* note 96, at 1380.

¹⁸⁸Bradley et al., *supra* note 6, at 9.

¹⁸⁹ Id. at 2, 4; Chen et al., supra note 6, at 23.

¹⁹⁰Bradley et al., *supra* note 6, at 4.

¹⁹¹ *Id*.

The effectiveness of the OECD's plan to tackle BEPS may hinge on how many countries adopt its recommendations, especially current so-called "tax havens" such as Bermuda and the Cayman Islands. 192 The OECD itself has acknowledged that "BEPS is of major significance for developing countries due to their heavy reliance on corporate income tax, particularly from multinational enterprises. 193 For this reason, it may be difficult to engage such countries in the OECD BEPS scheme, even though the OECD stated that doing so is "important. 194"

F. Looking Ahead: A World of Patent Boxes

While the effects of patent boxes conjoined with international tax reform aimed at BEPS are far from certain, one possible result is that patent box rates could become the new low corporate tax rates. Of course, as individuals like Sebastien Bradley have pointed out, the effectiveness of patent boxes could be limited by the continuance of tax havens, which will enable firms to shift their profits to these havens and benefit from their extremely low corporate tax rates. ¹⁹⁵ But the opposite situation is intriguing—if the international community eliminates tax havens, or significantly limits them, would this increase the efficacy of patent boxes—and perhaps their dominance? It could certainly be that one day the low patent box rate country will become the new "tax haven". Only in this scenario could nexus requirements provide countries with not just the tax revenue from patent box profits, but also with an increase in R&D investment and jobs.

These implications then lead to the possibility that low patent box tax rates undercut the effectiveness of patent boxes in countries with higher rates. Relative to most patent box countries, some have much lower rates, such as Cyprus and Liechtenstein, currently at 2.5%. While on its face this rate may appear as though it will attract the R&D and patent applications away from other parts of Europe and the U.S., it will likely be tempered by other business considerations that would deter companies from relocating their R&D to small countries with reduced economic benefits. 197

¹⁹⁵Bradley et al., *supra* note 6, at 9.

¹⁹² See Double Irish/Dutch Sandwich Part I, supra note 71; Simone & Sansing, supra note 31, at 10-11; DeAngelis, supra note 96, at 1369-70.

¹⁹³ About the Inclusive Framework on BEPS, OECD, http://www.oecd.org/ctp/beps-about.htm (last visited Nov. 4, 2017).

¹⁹⁴ Id.

¹⁹⁶Chen et al., *supra* note 6.

¹⁹⁷ While it is difficult to isolate the effect that the size of a country has on private investment in R&D, smaller countries tend to spend noticeably less than large, or even medium-sized countries as a percent of GDP. For example, in 2014, gross domestic expenditure in R&D as a percentage of GDP was at 0.48% in Cyprus, and 0.75% in Malta, compared to 1.38% in Italy. See Science, Technology and Innovation: Gross Domestic Expenditure On R&D (GERD), GERD as a Percentage of GDP, GERD per Capita and GERD per Researcher, UNESCO, http://data.uis.unesco.org/index.aspx?queryid=74# (last visited Nov. 3, 2017).

These could include the costs of relocating labor and capital, difficulties from language barriers, and unfavorable legal rules aside from patent boxes.

This is one possible scenario, but not necessarily the most likely one to occur. While the EU has begun to rein in the existence of tax havens among its members, 198 significant successes from the fight against BEPS are likely years away. Some critics argue that reforms taken by some European countries only amount to "window-dressing" and that tax experts are already finding new loopholes to circumvent the new limits. 199 On the other hand, many countries have recently joined the OECD's Inclusive Framework on BEPS, including low-tax jurisdiction Bermuda.²⁰⁰ Just two countries on Oxfam's list of the top 15 corporate tax havens have yet to join the Inclusive Framework—the Bahamas and Cyprus.²⁰¹ Even with more countries joining the Inclusive Framework and the MLI treaty, as with many international agreements, signing a treaty does not indicate how soon, or to what degree, a country will comply with it. The Inclusive Framework is not binding, ²⁰² and treaties like the MLI often have opt-out provisions and require implementing domestic legislation. Because intangibles like intellectual property can be easily transferred between countries, even if tax havens like Ireland actively implement the recommendations of the BEPS Action Plan, it seems quite possible, if not likely, that firms will simply shift their profits to other countries that still have not joined the OECD BEPS discussions, ²⁰³ or to those who are slow to implement their solutions.

Despite the absence of some countries in the coalition, the objectives of the OECD's plan do seem reasonably geared towards eliminating BEPS, or at least substantially reducing it. The OECD's recommendations regarding Actions 8-10 are obviously aimed at addressing the difficulties in valuating intangibles, 204 difficulties that many firms have exploited to gain tax advantages. This is without a doubt a key element in many tax avoidance strategies, and is therefore important for the international community to address. Reflecting the increasingly common adoption of the nexus requirement into innovation boxes around the globe,

¹⁹⁸ In August of 2016, the European Commission found that the preferential tax benefits Ireland extended to Apple constituted illegal state aid, which Ireland must recoup from Apple. European Commission Press Release IP/16/2923, State Aid: Ireland Gave Illegal Tax Benefits to Apple Worth Up to €13 Billion (Aug. 30, 2016), http://europa.eu/rapid/press-release_IP-16-2923_en.htm.

¹⁹⁹ Still Slipping the Net, supra note 28.

²⁰⁰Kazakhstan, Côte d'Ivoire and Bermuda Join the Inclusive Framework on BEPS, OECD (June 1, 2017), http://www.oecd.org/tax/kazakhstan-cote-d-ivoire-and-bermuda-join-the-inclusive-framework-on-beps.htm.

²⁰¹ Compare Esmé Berkhout, Tax Battles, OXFAM (Dec. 12, 2016), https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp-race-to-bottom-corporate-tax-121216-en.pdf, with Inclusive Framework on BEPS Composition, supra note 185.

²⁰² OECD Final Reports, supra note 15.

²⁰³ Inclusive Framework on BEPS Composition, supra note 185.

²⁰⁴ OECD Final Reports, supra note 15.

²⁰⁵ Simone & Sansing, *supra* note 31, at 3.

the OECD's guidance on Action 5 recommends this same requirement.²⁰⁶ This guidance, when combined with the transparency mechanisms recommended in the reports on Actions 5 and 12, will have a significant effect on firms that use innovation boxes to gain an inappropriate tax advantage.

While the OECD's plan has promise because of its extensive, reasoned, and targeted approach to BEPS, substantial reduction in BEPS is only possible with *extensive* international cooperation, especially cooperation coming from existing low-tax or no-tax jurisdictions. Such coordination may only be possible if international organizations begin to punish those who refuse to cooperate with the international community in taking actions against BEPS. If efforts like the OECD BEPS Action Plan are hampered by the continuance of harmful tax practices in a handful of countries, those who are committed to fighting BEPS need to deter these tax havens from continuing down their current path. This punishment could take a variety of forms designed to create diplomatic pressure, including sanctions carried out by international treaties, reduction in any state aid, and/or reduced aid from organizations like the IMF and the World Bank.

Given the roadblocks that will likely continue to plague the OECD's BEPS Action Plan, it might seem sensible for the United States to hold off on implementing an innovation box. However, the slow movement against BEPS on the international stage gives the U.S. ample time to craft sensible innovation box legislation. If the U.S. can create an innovation box before BEPS is significantly hindered, it will likely remain competitive in the resulting market for preferential IP tax regimes. Therefore, the United States Congress should take advantage of the slow-moving action against BEPS and create legislation to form an innovation box. ²⁰⁷ This innovation box should include, at a minimum, a strong nexus requirement, a patent box rate of 5-10%, and provisions that prevent unintentional overlap of tax benefits. ²⁰⁸

IV. CONCLUSION

Patent boxes have not existed for very long, and certainly not in their current forms. Despite this, trial-and-error results, as well as early databased observations, have shown that if designed with a nexus-approach and competitive rates, they can be successful at decreasing profit shifting. ²⁰⁹

²⁰⁶ OECD Final Reports, supra note 15.

²⁰⁷ While as of this writing the U.S. Congress appears on the verge of passing a tax reform bill, many are unconvinced that it will incentivize U.S. businesses to move jobs overseas. *See* Shawn Pogatchnik & Heather Long, *Irish eye Republican tax plan – and shrug*, WASHINGTON POST, Dec. 14, 2017, at A1.

²⁰⁸ See discussion supra Section III.C.

²⁰⁹ Stimmelmayr et al., *supra* note 5, at 20.

Nonetheless, profit shifting as a method of tax saving has existed for decades in one form or another, ²¹⁰ and its persistence will significantly undercut the benefits of a patent box. Because of this, a U.S. innovation box will only be effective if international reforms, such as the OECD BEPS Action Plan, limit the efficacy of current tax havens. This can only happen with significant cooperation on an international level, especially between nations in the developed world, where entities create IP at a much higher rate. ²¹¹ If the international community carries out impactful reforms, then the benefits of patent boxes will be amplified and lead to increased global competition for R&D and IP. In this scenario, if the U.S. wishes to remain a major player in this competition, it will need to implement a patent box with provisions similar to, or more attractive than, those of major European nations.

The OECD's BEPS Action Plan still has a long way to go, both in terms of country-by-country implementation and, to a somewhat lesser degree, the growth of the coalition behind it. The OECD and others aligned against BEPS will likely have to incentivize holdout countries to join the movement via economic and/or diplomatic pressure. Despite this slow yet promising international movement against BEPS, the U.S. should take advantage of the interim and move forward with creating an innovation box of its own, so that it can remain competitive for the R&D industry and the high-quality jobs that come with it. To have a maximum net positive effect, this innovation box should be optimally designed to both prevent harmful tax practices and compete with innovation boxes in other countries.

 $^{^{210}}$ Hill, supra note 19, at 20 (noting that the Revenue Act of 1962 was ineffective at preventing profit-shifting).

²¹¹ See 5.13 World Development Indicators: Science and technology, THE WORLD BANK (last updated Sept. 18, 2017), http://wdi.worldbank.org/table/5.13# (showing that in 2015 there were 19,199 patent applications filed by residents in lower-middle income countries, compared to 1,016,205 applications by residents in upper-middle income countries and 827,076 in high income countries).

THE CURIOUS CASE OF BRIAN BISHOP: INTERPRETATION OF THE WILLFULNESS REQUIREMENT IN THE AECA AND ITAR

Christopher T. Robertson*

I. INTRODUCTION

Brian Bishop liked guns. Mr. Bishop was both "an avid hunter and sportsman" and a financial management Foreign Services Officer at the U.S. embassy in Jordan. As an avid hunter and sportsman, Mr. Bishop attempted to ship over 10,000 rounds of ammunition among his belongings to his post in Jordan.² In compliance with Department of State policy, Mr. Bishop arranged to have his belongings shipped via a government contract carrier at no expense to himself.³ Mr. Bishop failed to inform the moving company that he was shipping ammunition, and signed a shipping inventory that did not reference the 366 pounds of ammunition included amongst his belongings. 4 The moving company discovered the ammunition while repackaging his belongings, and they subsequently contacted both Mr. Bishop and the Department of State about their discovery.⁵ Mr. Bishop admitted to trying to ship the ammunition in an interview with special agents of the Department of State's Diplomatic Security Service, and explained that the ammunition would be prohibitively expensive if purchased in Jordan.⁶ Mr. Bishop was convicted under the Arms Export Control Act (AECA) for attempting to export ammunition without a license.7

Mr. Bishop appealed his conviction to the Fourth Circuit Court of Appeals on two separate grounds, "that he did not willfully violate the AECA because he did not know it applied to the ammunition he attempted to export" and there was insufficient evidence that he knew the exportation of the ammunition was illegal, rather than merely a violation of Department of State policy. The AECA states that those that violate its provisions "willfully" are subject to penalties of up to 20 years in prison and/or a fine of up to \$1,000,000 for each violation. Mr. Bishop contended that the willful requirement of the AECA dictates that "the government must show not only that that he knew that his conduct was illegal, but also that he knew

^{*} George Mason University School of Law, J.D. Candidate, May 2018. I would like to thank my family, as I would not be here without their support when I needed it most.

¹ United States v. Bishop, 740 F.3d 927, 928 (4th Cir. 2014).

² Id. at 928-29.

 $^{^{3}}$ Id.

⁴ Id. at 929.

⁵ *Id*.

⁶ *Id*.

⁷ Id. at 928.

⁸ *Id*.

⁹Control of Arms Exports and Imports, 22 U.S.C. § 2778(c) (2014).

why."¹⁰ The government argued that it need only prove that Mr. Bishop knew his actions were illegal in general to find that he willfully violated the AECA.¹¹

The contention in *Bishop* over the meaning of "willful" reflects the primary concern of courts in the criminal enforcement of the AECA and its implementing regulations, the International Traffic in Arms Regulations (ITAR). The two primary challenges to criminal enforcement of the AECA and ITAR are the intent requirement, for the establishment of culpability, and the constitutionality of AECA and ITAR due to its vagueness. The primacy of the definition of "willful" for the purposes of an intent challenge is clear, but it is equally as important in the decisions in void-for-vagueness challenges.

The Supreme Court has yet to define willful in the context of the AECA, and courts have split on whether willfulness in the context of the AECA signifies a need to demonstrate general intent or specific intent. 12 The AECA and ITAR are meant to ensure U.S. national security and promote "world peace" by limiting the traffic of arms to foreign persons and nations. 13 As a result, indecision amongst the circuits about the intent necessary for a conviction of a violation do not serve this purpose. The indecision and lack of clarity in the definition of intent will also lead to further challenges in the courts until the Supreme Court deigns to define willful in the context of the AECA and ITAR. This article will argue that the purpose of the AECA and ITAR would be best served if the Court uses a two-part test. This test would ask 1) whether the defendant's employment or experience would be sufficient to impute knowledge that their actions would violate the regulations, and then 2) apply either a specific or general intent definition of willful depending on the answer to that question.

To understand the complex issues, courts have been forced to consider in their efforts to define "willful" several different factors, which this article will lay out for clarity purposes. In the first section, this article will present the background of this issue, including both the purpose and development of the AECA and ITAR and the applicable ITAR provisions that impact the specificity of the regulations. The second section will examine the application and various treatments of the willfulness requirement of the AECA in the courts and how it impacts challenges on both intent alone and those on void-for-vagueness. The third section will argue for the interpretation and reasoning the Supreme Court should adopt to resolve the current circuit split.

¹⁰ Bishop, 740 F.3d at 932 (emphasis in original).

¹¹ *Id*.

¹² United States v. Roth, 628 F.3d 827, 833-34 (6th Cir. 2011).

^{13 22} U.S.C. § 2778(a)(1).

II. BACKGROUND

A clear understanding of the impact of the definition of "willful" in the context of the AECA requires an examination of the AECA, its implementing regulations (ITAR), and the United States Munitions List (USML) contained within ITAR. It is necessary to understand the purpose of ITAR to discern the motivations of the courts and to comprehend the various mitigating doctrines that courts have used to deny or dismiss defendants' challenges in enforcement actions. It is also necessary to examine ITAR provisions covering the administration of ITAR to show the mutability of the regulations, the items covered by the list to demonstrate the complexity of the regulations, and the penalties and enforcement provisions those dealing in controlled articles and services can expect if they violate ITAR.

A. Purpose and Development of ITAR

ITAR consists of a series of regulations promulgated by the Department of State to enforce the provisions of the AECA, of which the USML is a component.¹⁴ The passage of the AECA was intended to be "in the furtherance of world peace and the security and foreign policy of the United States" by creating the USML and placing the power to control the import and export of "defense articles and services" in the hands of the President.¹⁵

In 1976, the 94th United States Congress passed the AECA in the shadow of the American people's eroding support of unilateral arms transfers by the executive branch and continued dissatisfaction over U.S. involvement in the Vietnam War. One express purpose of the AECA was for "increased congressional participation in the formulation of U.S. military assistance and sales policies and programs. Tongress recognized that there was still valid foreign policy and national security reasons to allow the sale of defense articles and services, but the House of Representatives noted that "arms transfers cannot become an automatic, unregulated process."

The version of the AECA that passed reflected that Congress' desire to balance the needs of the U.S.'s allies and its own national security.¹⁹ This original version of the AECA appeared to focus on military technologies to a greater extent than later incarnations of the USML, but began the tradition of vague and potentially over-inclusive definitions that

18 Id. at 12.

¹⁴ 22 U.S.C. § 2778; General Authorities, Receipt of Licenses, and Ineligibility, 22 C.F.R. § 120.1 (2014).

^{15 22} U.S.C. § 2778(a)(1).

¹⁶ H.R. REP. No. 94-1144, at 11 (1976).

¹⁷ *Id*.

¹⁹ H.R. 13680, 94th Cong. (1976).

has plagued ITAR throughout its existence.²⁰ From this earliest incarnation of the AECA, the administration of the AECA and delegation of items on the USML has been left exclusively to the discretion of the President and those he would delegate this power to.²¹ The result of this executive discretion is a mutable USML subject to changes over time as new technologies arise.²²

B. Administration Provisions

Under the AECA, the President is authorized "to control the export and import of defense articles and defense services."23 The President is responsible for the designation of "the articles and services deemed to be defense articles and defense services for purposes of import or export controls."24 The items designated by the President to be subject to export and import control under the AECA "shall constitute the [USML]."25 The designations to the USML made by the President are not unilateral, but must be within the scope of the USML defined by the AECA, and the scope of the USML can only be changed by a specific process.²⁶ While the President's designations are subject to legislative review, the AECA explicitly states that these designations to the USML are not subject to judicial review. 27 The President alone does not hold the power to administer the USML, as the power has been further delegated to the Secretary of State.²⁸ Under the delegation to the Secretary of State, ITAR is chiefly "administered by the Deputy Assistant Secretary of State for Defense Trade Controls, Bureau of Political-Military Affairs. 29 That official administers the Directorate of Defense Trade Controls (DDTC), which is the primary office that registrants and licensees under ITAR interact with in the course of their business operations.³⁰

Because the USML is dynamic, and the list so inclusive, it is often unclear whether an item is covered by the designations to the USML, and ITAR has established the commodity jurisdiction procedure to make this determination.³¹ The commodity jurisdiction procedure is used when it is unclear whether an article or service is covered by the USML and it "may

²⁰ H.R. 13680, 94th Cong. (1976) (defining defense articles and defense services for the purposes of the USML); The United States Munitions List, 22 C.F.R. § 121.1 (2013) (enumerates the many categories of items on the current incarnation of the USML).
²¹ H.R. 13680, 94th Cong. (1976) (codified as 22 U.S.C. § 2778(a)).

²² H.R. 13680, 94th Cong. (1976) (codified as 22 U.S.C. § 2778(a)). ²² 22 C.F.R. § 120.1 (credits reflect frequent revisions to the USML).

²³ 22 U.S.C. § 2778(a)(1) (enforced by regulation 22 C.F.R. § 120.1(a)).

²⁴ Designation of Defense Articles and Defense Services, 22 C.F.R. § 120.2 (2014).

²⁵ 22 U.S.C. § 2778(a)(1).

²⁶22 C.F.R. § 120.2.

²⁷ 22 U.S.C. § 2778(h).

²⁸ 22 C.F.R. § 120.1(a) (citing Exec. Order No. 13,637, 78 FR 16,129 (2013)).

²⁹ *Id*.

³⁰ 22 C.F.R. § 120.1(b)(2)(i)-(iii).

³¹ See Commodity Jurisdiction, 22 C.F.R. § 120.4 (2014).

also be used for consideration of the redesignation of an article or service currently covered by the USML." ³² The commodity jurisdiction determinations are made on a "case-by-case basis" ³³ and entail "consultation among the Departments of State, Defense, Commerce, and other U.S. Government agencies and industry in appropriate cases."³⁴

In addition to the CJ process, ITAR allows for businesses or individuals to seek advisory opinions from the DDTC. Under the advisory opinion system "[a]ny person desiring information as to whether the [DDTC] would be likely to grant a license or approval for the export or approval of a particular defense article or defense service to a particular country may request an advisory opinion from the [DDTC]."³⁵ These advisory opinions are also made "on a case-by-case basis and apply only to the particular matters presented to the [DDTC]."³⁶

C. Controlled Articles and Services

The multitude of actions and items controlled by ITAR are encapsulated by the vast USML, and a broad view of the USML is necessary before examining its component parts.³⁷ The USML is broken down into twenty-one categories and they cover a wide range of defense articles.³⁸ The USML prohibits, among other things, conventional arms (e.g. firearms,³⁹ guns and armaments,⁴⁰ and ammunition and ordinances⁴¹), military vehicles (e.g. ground vehicles, ⁴² surface naval vessels, ⁴³ submersibles, ⁴⁴ and aircraft ⁴⁵), and destructive weapons (e.g. nuclear weapons, ⁴⁶ biological and chemical weapons, ⁴⁷ and directed energy weapons⁴⁸).

ITAR's control does not extend only to the physical items listed on the USML, but also extends to technical data.⁴⁹ The regulation specifically states the definition of "defense article" under ITAR "includes technical data recorded or stored in any physical form, models, mockups or other

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    32 22 C.F.R. § 120.4(a).
    34 22 C.F.R. § 120.4(d)(2).
    35 Advisory Opinions and Related Authorizations, 22 C.F.R. § 126.9(a) (2016).
    36 Id.
    37 See 22 C.F.R. § 121.1.
    38 See generally 22 C.F.R. § 121.1.
    39 22 C.F.R. § 121.1(Category I).
    40 22 C.F.R. § 121.1(Category III).
    41 22 C.F.R. § 121.1(Category VII).
    42 2.F.R. § 121.1(Category VII).
    43 22 C.F.R. § 121.1(Category VII).
    44 22 C.F.R. § 121.1(Category VI).
    45 22 C.F.R. § 121.1(Category XXI).
    46 22 C.F.R. § 121.1(Category XVII).
    47 22 C.F.R. § 121.1(Category XVII).
    47 22 C.F.R. § 121.1(Category XIV).
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48 22 C.F.R. § 121.1(Category XVIII).
 49 Defense Article, 22 C.F.R. § 120.6 (2014).

items that reveal technical data directly relating to items designated in [the USML]."50 Technical data is further defined as "[i]nformation...which is required for the design, development, production, manufacture, assembly, repair, maintenance modification testing, or of articles...include[ing]...blueprints, drawings, photographs, plans, instructions or documentation."51 The restriction on the sharing of technical data explicitly does not include "information concerning general scientific, mathematical, or engineering principles commonly taught in schools, colleges, and universities, or information in the public domain...it also does not include basic marketing information on function or purpose." 52 Information in the public domain is defined as "information which is published and which is generally accessible or available to the public."53

The restrictions set forth by the USML and other applicable sections of ITAR are all meant to restrict furnishing exports to foreign persons. TAR prohibits "[t]he furnishing of assistance ... to foreign persons, whether in the United States or abroad in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing, or use of defense articles." Under ITAR, a transfer of either a physical item or technical data is considered an export if it is provided to a foreign person, whether inside or outside the U.S. 56

D. Penalties for Violation and Enforcement Procedures

ITAR specifies that it is illegal for a person or business without a license from the DDTC to: "export or attempt to export" any defense article or technical data, provide or attempt to provide a defense service, to reexport or retransfer (or attempt to do so) any defense article, "import or attempt to import any defense article," or to conspire to do any of these. ⁵⁷ It is further unlawful to violate the terms of a license, to broker any import or export without a license, and to not register when required to do so. ⁵⁸ For a business to be liable under ITAR for violations it requires only a single act "of manufacturing or exporting a defense article or furnishing a defense service." ⁵⁹ Enforcement of violations under ITAR also embrace a principle/agent system and states that businesses will be held responsible

⁵⁰ Defense Article, 22 C.F.R. § 120.6 (2014).

⁵¹ Technical Data, 22 C.F.R. § 120.10(a)(1) (2014).

^{52 22} C.F.R. § 120.10(b).

⁵³ Public Domain, 22 C.F.R. § 120.11(a) (2014).

⁵⁴ Defense Services, 22 C.F.R. § 120.9(a)(1) (2014).

⁵⁵ *Id*.

⁵⁶ Id.

⁵⁷ Violations, 22 C.F.R. § 127.1(a)(1)-(4) (2014).

⁵⁸ 22 C.F.R. § 127.1(b)(1)-(3).

⁵⁹ *Id*.

for the actions of their "employees, agents, brokers, and all authorized persons."60

The punishment of ITAR violations is left up to both the courts and the Department of State. 61 The AECA states that any person who "willfully violates any provision of [the AECA]...shall upon conviction be fined for each violation not more than \$1,000,000 or imprisoned not more than 20 years, or both."62 The AECA further states that "the Secretary of State may assess civil penalties for violations of [ITAR]...and further may commence a civil action to recover such penalties."63 Under ITAR, the "Assistant Secretary of State for Political-Military Affairs is authorized to impose a civil penalty...for each violation of [the AECA], an amount not to exceed \$1,134,602."64

Should the Department of State wish to pursue an administrative action, ITAR has set out a series of administrative procedures to govern the process. 65 The administrative process is overseen by an Administrative Law Judge, who is appointed by the Department of State. 66 An administrative procedure under ITAR is initiated when the DDTC sends the accused a charging letter, which lays out the facts supporting the alleged violations and indicates the provisions of ITAR they are alleged to have broken.⁶⁷ The accused must then provide an answer to the charging letter, and may demand an oral hearing if they wish. 68 The administrative procedure allows the accused to conduct discovery⁶⁹ and participate in hearings.⁷⁰ Once the judge has heard the case, he will prepare and submit a report with his recommendations to the Assistant Secretary for Political-Military Affairs, who will render the final judgment. 71 If the accused does not wish to avail themselves of the full range of administrative procedures, they may, instead, by agreement with the DDTC, submit to the judge a proposal for the issuance of a consent order, but if the judge does not approve the agreement the case will proceed as though no offer was made.⁷² The consent agreement must be approved by the Assistant Secretary of State for Political-Military Affairs.⁷³

^{60 22} C.F.R. § 127.1(c).

^{61 22} U.S.C. § 2778(c), (e) (2014).

^{62 22} U.S.C. § 2778(c).

^{63 22} U.S.C. § 2778(e).

⁶⁴Civil Penalty, 22 C.F.R. § 127.10(a)(1)(i) (2014).

⁶⁵ See generally Exclusion of Functions from the Administrative Procedure Act, 22 C.F.R. § 128 (2013).

⁶⁶ Administrative Law Judge, 22 C.F.R. § 128.2 (2013).

⁶⁷ Institution of Administrative Proceedings, 22 C.F.R. § 128.3(a) (2013).

⁶⁸ Answer and Demand for Oral Hearing, 22 C.F.R. § 128.5(b) (2013).

⁶⁹ Discovery, 22 C.F.R. § 128.6(a) (2013).

⁷⁰ Hearings, 22 C.F.R. § 128.8(a) (2013).

⁷¹ Proceedings Before and Report of Administrative Law Judge, 22 C.F.R. § 128.9(b) (2013).

⁷² Consent Agreements, 22 C.F.R. § 128.11(a) (2013).

⁷³ *Id*.

III. ENFORCEMENT OF ITAR INPRACTICE

As stated in the overview of ITAR's enforcement provisions, enforcement comes in two different flavors: criminal and administrative. It is integral in coming to an overall determination of the best interpretation of "willful" to touch on the administrative procedure. The chief importance of the administrative procedure is the fact that it exists as an alternative to criminal enforcement of ITAR violations, and that it contains no intent requirement for violations. In the realm of criminal enforcement, the courts' treatment of the willful requirement is the most important factor. The interpretation of willful remains the crux of most courts' decisions in criminal enforcement of ITAR, and the disagreement of the circuits creates an unacceptable vagueness in the enforcement itself.

A. Administrative Procedure

Under administrative enforcement, the Department of State's ITAR administration agency (DDTC) is authorized to assess civil penalties of up to \$500,000 for each violation, and is not required to prove any intent for the violation. ⁷⁴ The DDTC is able to hold parent companies, predecessors, and successors liable for the actions of related companies. ⁷⁵ In practice, the administrative procedure is rarely utilized, having been used only 60 times since the passage of the AECA in 1976. ⁷⁶ Out of the sixty publicly available cases, each one has been resolved by a consent agreement and order ending the matter, and there is no record of the wider administrative procedure ever being used. ⁷⁷ Though administrative enforcement is rarely used, its seemingly indiscriminate application creates a notable "*in terrorem*" effect on those businesses that must deal with ITAR compliance. ⁷⁸

In addition to these fines imposed by administrative consent agreements, the agreements also often include disbarment, an eventual reinstatement process, and directed remediation. Under administrative enforcement, the DDTC is authorized to impose discretionary administrative disbarment, typically for three years. Once the period of disbarment has run, the disbarred party is not automatically reinstated, but must instead petition the DDTC and prove that the issues that led to disbarment have been mitigated. The process of reinstatement is often

^{74 22} U.S.C. § 2778(e).

⁷⁵ Fried Frank, *ITAR Enforcement Digest*, FRIED FRANK 1 (July 2012) *available at* http://www.friedfrank.com/siteFiles/Publications/ITAR%20Enforcement%20Digest.pdf.
⁷⁶ See generally Directorate of Defense Trade Controls, *Penalty and Oversight Agreements*,
LLS, DEP'T, OF STATE, http://pmddtc.state.gov/compliance/pos.html (Jast visited Apr. 2, 2018)

U.S. DEP'T. OF STATE, http://pmddtc.state.gov/compliance/poa.html (last visited Apr. 2, 2018). 77 M

⁷⁸ *Id.*; Fried Frank, *supra* note 75, at 3.

 $^{^{79}}$ Fried Frank, *supra* note 75, at 2. 80 *Id*

⁸¹ *Id*.

expensive, difficult, and time-consuming.⁸² In addition to the reinstatement costs and lost income from the period of disbarment, the directed remediation process is also burdensome.⁸³ Directed remediation is where the violator agrees to institute "enhanced compliance measures, usually for a period of between three and five years."⁸⁴

B. "Willful" and Criminal Enforcement of ITAR

Under the AECA, criminal prosecutions for violations of the regulations grant courts the discretion to impose fines of up to \$1 million per violation and to imprison offenders for up to 20 years. The main difference between those cases where the DDTC utilizes administrative enforcement and those where the Department of State opts for criminal prosecution is the intent required for the violation. The administrative enforcement violations of ITAR are strict liability, but criminal prosecutions require demonstration that deviation from the regulations was "willful." The definition of willfulness is not black and white in the context of the AECA and ITAR, but instead exists on a spectrum that ranges from what this article will call pure general intent to pure specific intent.

In *Bryan v. United States* the Supreme Court notes that the definition of "willful" is "'a word of many meanings' whose construction is often dependent on the context in which it appears." The Court in *Bryan* remarks that the word is most often used to differentiate between "deliberate and unwitting conduct," but that in the criminal context it most often refers to a culpable state of mind. The Court goes on to define a willful violation of a statute as one in which the "defendant acted with knowledge that his conduct was unlawful." The defendant in *Bryan* was not prosecuted for a violation of the AECA, but was instead convicted under a provision of the Firearms Owners' Protection Act (FOPA) that prohibited anyone from willfully violating its forbiddance of dealing in firearms without a license. This decision has nonetheless assumed importance with relation to the AECA as some circuits have adopted its definition of willful as signifying a general intent requirement in lieu of a Supreme Court decision specifically pertaining to the AECA.

 $^{^{82}}$ Fried Frank, supra note 75, at 2.

⁸³ *Id*.

⁸⁴ *Id*.

⁸⁵22 U.S.C. § 2778(c), (e).

⁸⁶ Fried Frank, *supra* note 75, at 2.

^{87 22} U.S.C. § 2778(c).

⁸⁸ Bryan v. United States, 524 U.S. 184, 191 (1998) (quoting Spies v. United States, 317 U.S. 492, 497 (1943)).

⁸⁹ Id.

⁹⁰ Id. at 191-92 (citing Ratzlaf v. United States, 510 U.S. 135, 137 (1994)).

⁹¹ *Id.* at 184.

⁹² See Roth, 628 F.3d at 834-35.

The pure general intent requirement espoused in Bryan, wherein the government need only show that the defendant knew the act was unlawful to establish a willful intent, has been adopted by a few courts. In United States v. Roth, the Sixth Circuit Court of Appeals noted the circuit split on the definition of willfulness, and relied heavily on Bryan in deciding that willful signifies a general intent requirement. 93 The court in Roth noted that the Supreme Court in Bryan declined to extend an exception from Cheek v. United States that the defendant have "knowledge of a law to satisfy willfulness requirement" because that exception only applies to "highly technical statutes,' such as tax laws and banking regulations."94 The court in Roth then surprisingly concluded that ITAR is unlike those kinds of statutes that "[present] the danger of ensnaring individuals engaged in apparently innocent conduct." 95 ITAR, as outlined above, is an exceedingly complex set of regulations, but the Roth court skipped that consideration and instead merely noted that "Congress did not instruct courts to apply the willfulness requirement to any specific provision [in the AECA]."96 The Sixth Circuit Court in Roth ultimately hewed closely to Bryan and stated that a willfulness finding "only requires knowledge that the underlying action is unlawful."97

Other circuit courts have interpreted the willfulness requirement as requiring only general intent, but with slightly more stringent intent requirements. In practice, this interpretation of willful exists farther down the continuum towards specific intent. In *United States v. Murphy*, the First Circuit Court of Appeals considered a case where the defendant had been convicted by the district court for conspiracy to export arms without a license and other charges related to selling firearms. The defendant appealed, arguing that he did not know about the licensing requirements of ITAR. He defendant contended that conviction under the willfulness requirement of the AECA and ITAR required "proof of his specific knowledge of the licensing requirement and the Munitions List." The court accepted in part, and rejected in part, the defendant's contention, and stated that "[w]hile the act does require proof of specific intent, willfulness means that 'defendant must know that his conduct in exporting from the United States articles proscribed by the statute is violative of the law." 101

⁹³ See generally Roth, 628 F.3d at 834-35.

⁹⁴ Id. at 834-35 (discussing Cheek v. United States, 498 U.S. 192, 200 (1991)) (citing Bryan v. United States, 524 U.S. 184, 194-195 (1998)).

⁹⁵ Id. at 835 (quoting Bryan v. United States, 524 U.S. 184, 194-195 (1998)).

⁹⁶ *Id*.

⁹⁷ *Id*.

⁹⁸ United States v. Murphy, 852 F.2d 1, 2 (1st Cir. 1988).

⁹⁹ Id. at 6.

¹⁰⁰ *Id*.

¹⁰¹ Id. at 7 (quoting *United States v. Lizarragaa-Lizarraga*, 541 F.2d 826, 828-29 (9th Cir. 1976))

¹¹³ *Id.* at 1436-37.

Moreover, the court clarified that the defendant must be shown to have "voluntarily and intentionally violated a known legal duty not to export the proscribed articles" Here, the intent requirement was clearly interpreted as general in nature, as the defendant was not required to know that his duty not to export was derived from the AECA. That said, it is also clear that this intent requirement, while remaining general in nature, was more stringent than that required by the Supreme Court in *Bryan* and the Sixth Circuit Court in *Roth*. 103 While those courts found that proof of mere knowledge that their actions were illegal was sufficient for conviction, 104 in *Murphy* the court required the government to prove that the defendant knew that the export from the United States was illegal. 105

The Third Circuit Court of Appeals applied a similar interpretation in *United States v. Tsai*, but curiously suggested that the application of general or specific intent should vary on a case-by-case basis. ¹⁰⁶ In *Tsai*, the court reviewed the defendant's conviction for violating and conspiring to violate the AECA. ¹⁰⁷ The defendant in *Tsai* contended that it was unclear whether the items he was charged with shipping without the requisite license were on the USML, so he did not willfully violate the AECA. ¹⁰⁸ The court in *Tsai* held that the district court properly instructed the jury when it told them that all they had to find to convict "was that defendant knew that he could not export that particular item." ¹⁰⁹ To support this proposition, the court cited *Murphy*, but also appeared to have left the door open for varying interpretations of the willfulness requirement. ¹¹⁰ While considering whether the statute infers a general or specific intent requirement, the court noted that "[t]here may be some cases in which one approach will fit better than the other." ¹¹¹

The other approach referred to in *Tsai*, or a specific intent requirement interpretation, represents the other end of the spectrum from pure general intent. The most conspicuous and direct endorsement of this interpretation comes from *United States v. Gregg*, which was heard by the Eighth Circuit Court of Appeals. ¹¹² The defendants in *Gregg* were convicted in the district court for violations of the AECA, and the defendants alleged that the AECA was unconstitutionally vague on appeal. ¹¹³ Defendants relied on the alleged vagueness of the AECA and

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102 Murphy, 852 F.2d at 7 (emphasis added) (quoting United States v. Lizarragaa-Lizarraga, 541 F.2d 826, 829 (9th Cir. 1976)).
103 Roth, 628 F.3d at 835.
104 Id.
105 Murphy, 852 F.2d at 7.
106 United States v. Tsai, 954 F.2d 155, 162 (3d Cir. 1992).
107 Id. at 157.
108 Id. at 159.
109 Id. at 160.
110 Id. at 162.
111 Id.
112 United States v. Gregg, 829 F.2d 1430, 1436 (8th Cir. 1987).
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ITAR to undermine the supposed willfulness of their intent to commit the crime. 114 The court held that a lay person's understanding of the regulations is not pertinent, but the important factor is whether the defendants had the requisite experience or knowledge to truly understand the regulations. 115 While addressing the intent requirement, the court held that it is "perfectly clear that the Government must prove beyond a reasonable doubt that the defendant acted knowingly and willfully, and with specific intent, and particular knowledge." 116 The court further noted the elements of a conviction under the AECA and stated that it requires "[the] knowledge that the exports involved will be used for the benefit of, or that the destination or intended destination of the goods or technology involved is, any controlled country or any country to which exports are controlled for foreign policy purposes." 117

C. Testing the Interpretations

The narrow interpretation by the court in Gregg ¹¹⁸ of the willfulness requirement clearly contrasts with the far more inclusive interpretation offered by the court in Roth, ¹¹⁹ and the gulf between these interpretations represents the continuum on which the various circuits fall. The difference in interpretations illustrates that the same case tried in a different circuit may yield different results.

In the introduction of this article, the bad judgment and travails of the defendant in *Bishop* was discussed, and this case can be used as a foil to analyze the impact of the various interpretations of intent. In *Bishop*, the defendant was convicted under the AECA for attempting to ship an extraordinary amount of ammunition for his own consumption to Jordan, where he was posted as a Department of State employee. ¹²⁰ The defendant's appeal was heard in the Fourth Circuit Court of Appeals, and the court proceeded to interpret the case in the mold of *Roth* and specifically cited the proposition in *Bryan* that "knowledge that the conduct is unlawful is all that is required [to convict]." The defendant in *Bishop* was therefore convicted under the most liberal interpretation of the AECA's willfulness requirement, but it is worth considering how he would fare under a slightly more constrained interpretation.

If the defendant in *Bishop* had been tried in the First Circuit Court of Appeals under the same interpretation it employed in *Murphy*, it is possible he could have avoided conviction. The court in *Murphy* stated that

¹¹⁷ *Id.* at 1435.

¹¹⁴ Gregg, 829 F.2d at 1436-37.

¹¹⁵ *Id.* at 1436.

¹¹⁶ *Id*.

¹¹⁸ See id. at 1436.

¹¹⁹ See Roth, 628 F.3d at 834-35.

¹²⁰ Bishop, 740 F.3d at 928.

¹²¹ Id. at 933 (quoting Bryan v. United States, 524 U.S. 184, 196 (1998)).

"[w]hile the act does require proof of specific intent, willfulness means that 'defendant must know that his conduct in exporting from the United States articles proscribed by the statute is violative of the law." The defendant in *Bishop* meanwhile stated that he was unaware that the shipment of the ammunition was illegal, but contended that he believed that shipping it was merely a violation of Department of State policy. The court did not expend much effort on determining if this was indeed the case, given that it used the willfulness interpretation presented in *Bryan*, but just outright rejected the defendant's contention. The functions were "violative of the law," and found that he did not, it is very possible he could have avoided conviction under a *Murphy* interpretation of the willfulness requirement. The indecision in whether or not he would be convicted lies in the suggested evidence in the case that he knew, or had the opportunity to know, that his actions were unlawful if he had read the materials available to him.

If the Third Circuit Court of Appeals had heard the case against the defendant in *Bishop*, applying the same criteria it espoused in *Tsai*, it is impossible to say whether he would have been convicted or not. The key phrase that leads to the indeterminacy of the outcome is when the court in *Tsai* stated that "[t]here may be some cases in which one approach will fit better than the other" when employing a willfulness interpretation like the one used by the *Murphy* court. All of the indeterminacy of *Murphy*'s interpretation as applied to the facts of *Bishop* remains, but it also adds what appears to be a policy consideration. The mere fact that the *Tsai* court implies that the intent requirement varies with the facts of a case presents a wide latitude to the judge in any given case on how he instructs a jury (or how he rules in a bench trial).

Thus, a judge hearing *Bishop* in the Third Circuit may be forced to consider how important it is for a Department of State employee not to have ammunition or consider the possible foreign policy implications of such an action, but both of these considerations should be foreign to a judge. In the context of the facts in *Bishop*, and the nature of the AECA enforcement in general, such policy considerations stray dangerously close to foreign policy and political considerations not usually entertained by the judicial department. For these reasons, it is not possible to say how *Bishop* would have been decided in the Third Circuit Court of Appeals.

Finally, *Bishop* would probably not have been convicted in the Eighth Circuit Court of Appeals if the court maintained the same stance it held in *Gregg*. In *Gregg*, the court held that a conviction under the AECA

125 Id. at 935.

¹²² Murphy, 852 F.2d at 7 (quoting United States v. Lizarragaa-Lizarraga, 541 F.2d 826, 828-29 (9th Cir. 1976)).

¹²³ Bishop, 740 F.3d at 932, 935.

¹²⁴ *Id.* at 934.

¹²⁶ Tsai, 954 F.2d at 162.

requires that the prosecution prove beyond a reasonable doubt that the defendant had "[the] knowledge that the exports involved will be used for the benefit of, or that the destination or intended destination of the goods or technology involved is, any controlled country or any country to which exports are controlled for foreign policy purposes."127 According to the facts of Bishop, there was no determination that the defendant knew that shipping ammunition to Jordan without a license was prohibited by the AECA, and the record shows that even the Department of State employee in charge of educating employees about travel restrictions did not know why the items were prohibited. 128 The court in *Gregg* further concluded that it is "perfectly clear that the Government must prove beyond a reasonable doubt that the defendant acted knowingly and willfully, and with specific intent, and particular knowledge."129 It cannot be said, on the basis of the facts presented in Bishop, that the prosecution would be able to prove beyond a reasonable doubt that the defendant "acted knowingly and willfully" or with "particular knowledge" that the shipment of the ammunition was prohibited by the AECA. 130

On their faces, these various interpretations of the AECA's willfulness requirement appear similar, but the application of these decisions to the facts of one case illustrates just how different these interpretations are in practice. Taken as a whole, the interpretations employed across the federal circuits demonstrate the uncertainty defendants face when charged with violating the AECA. This system-wide indecision does not serve the purposes of the AECA, that of protecting national security and limiting the arms trade, and subjects defendants in certain circuits to especially harsh punishments for what may be simply bad decision-making or an innocent mistake. The federal circuits will not adopt a uniform interpretation of the willfulness requirement if left to their own devices. Uniformity in the enforcement of such an important regulation is key, and it appears that the only way to resolve the current indeterminacy is for the Supreme Court to rule on the proper interpretation of the willfulness requirement.

IV. PROPOSED INTERPRETATION OF THE WILLFULNESS REQUIREMENT

If and when the Supreme Court decides on an interpretation of willfulness in the AECA, it should follow its decision in *Bryan*, but not the interpretation of that decision relied upon by many of the circuit courts. The Court in *Bryan* considered the defendant's appeal for a conviction for "willfully dealing in firearms without a federal license." ¹³¹ In upholding the defendant's conviction in the district court, the Court noted that "[t]he

¹²⁷ Gregg, 829 F.2d at 1435.

¹²⁸ See Bishop, 740 F.3d at 930-31.

¹²⁹ Gregg, 829 F.2d at 1436.

¹³⁰ See generally Bishop, 740 F.3d at 928-31.

¹³¹ Bryan, 524 U.S. at 186.

word 'willfully' is sometimes said to be 'a word of many meanings' whose construction is often dependent on the context in which it appears." ¹³² The Court further noted that "[m]ost obviously it differentiates between deliberate and unwitting conduct, but in the criminal law it also typically refers to a culpable state of mind." ¹³³ The Court concluded that, in a criminal context, a willful act is one undertaken with a "bad purpose," and so it only needs to be proved that the defendant knew his actions were unlawful to secure a conviction. ¹³⁴

One of the most important portions of the *Bryan* decision, and the one that is most often ignored or glossed over in ITAR and AECA cases, is the section discussing the exceptions to the general rule that willful signifies general intent in criminal cases.¹³⁵ In this section, the Court discusses the exception for violators of "highly technical statutes that present [...] the danger of ensnaring individuals engaged in apparently innocent conduct."¹³⁶ The Court, in previous cases, found that the highly technical statutes run counter to the idea that "ignorance of the law is no excuse" and to be convicted under such statutes with willfulness requirements, knowledge of the law is required.¹³⁷ The Court held that the willfulness requirement in FOPA does not carve out an exception because that statute is not "highly technical," and, therefore, "knowledge that conduct is unlawful is all that is required."¹³⁸

Though FOPA and the AECA may appear, on their faces, to be similar because they both deal with federal licensing and firearms sales, the AECA is more complex and a far more inclusive statute. The implementing regulations for the AECA, ITAR, is a vastly complicated set of regulations covering an immense range of items besides firearms.¹³⁹ ITAR contains the USML, which itself covers twenty-one separate categories of items ranging from firearms to satellites. ¹⁴⁰ Further, ITAR also prohibits providing technical data to foreign nationals ¹⁴¹ and even selling simple components because they were specially designed for a defense article on the USML. ¹⁴² Also adding to ITAR's complexity are provisions stating that defense articles are those articles that "meet [...] the criteria of a defense article...on

¹³² Bryan, 524 U.S. at 191 (quoting Spies v. United States, 317 U.S. 492, 497 (1943)).

¹³³ *Id*.

¹³⁴ Id. (citation omitted).

¹³⁵ See id. at 193-96.

¹³⁶ *Id.* at 194 (citations omitted).

¹³⁷ Bryan, 524 U.S.at 194-95.

¹³⁸ Id. at 196.

 $^{^{139}\}mbox{See}$ generally U.S. Dep't of State International Traffic in Arms Regulations, 22 C.F.R. \S 122.1 (2012).

^{140 22} C.F.R. § 121.1, Categories I, XV.

^{141 22} C.F.R. § 120.6.

¹⁴² Steven Brotherton, *Beyond Reach? How to Develop ITAR-free Systems*, WORLDECR, 1 (Mar. 2011), *available at* https://www.worldecr.com/wp-content/uploads/2012/07/ITAR-download-article.pdf.

the [USML]" or "provide [...] the equivalent performance capabilities." Provisions like these detract from the idea that the AECA and ITAR provide notice to potential violators, because they are not specific but generally describe categories of objects. In practice, it can be very difficult to determine if you are violating ITAR's provisions even if familiar with the regulations.

ITAR's complexity is also exacerbated by the mutability of the regulations. ITAR is administrated by the President and, by delegation, the Department of State. The Department of State can remove items from the USML with only thirty days' notice, and the sheer volume of defense services and articles covered by the USML means that the list of controlled services and articles is constantly changing. It cannot be that defendants like Brian Bishop, who was not in the business of selling weapons, would have adequate notice of what was prohibited by ITAR and the AECA due to the complexity of the regulations.

In various void-for-vagueness challenges to ITAR and the AECA, the courts have recognized that these regulations are exceedingly complex, and have promulgated a justification for a qualified general intent requirement. 146 In Zhen Zhou Wu, one of the more recent cases that appeared before the First Circuit Court of Appeals, the court acknowledged that "[one of the USML categories]'s broad language and lack of technical parameters do not give 'fair notice' to a 'person of ordinary intelligence' that [restricted defense articles] are Munitions List-controlled."¹⁴⁷ The court stated that, despite the complexity of the regulations, the defendants were not just "ordinary people sending gifts to friends living overseas," but promoted themselves as exporters of military supplies and compliance experts.¹⁴⁸ The court recognized that exporting military equipment is a "sensitive business" directed by "a relatively small group of sophisticated international businessmen." ¹⁴⁹ The court concluded that, as sophisticated business people specializing in the export of military equipment, the defendants are expected to comply with the complicated ITAR regulations even if their meaning would not be obvious to an ordinary person. 150 The court points out that it was considering whether the statute was vague "as applied to these particular defendants."151 The idea of a person's station

¹⁴³ Policy on Designating or Determining Defense Articles and Services on the U.S. Munitions List, 22 C.F.R. § 120.3(a)(1)-(2) (2013).

 ^{144 22} C.F.R. § 120.1(a) (citing Exec. Order No. 13,637, 78 Fed. Reg. 16,129 (Mar. 8, 2013)).
 145 22 C.F.R. § 120.4.

¹⁴⁶ See United States v. Zhen Zhou Wu, 711 F.3d 1, 14-15 (1st Cir. 2013); see also United States v. Lee, 183 F.3d 1029, 1032 (9th Cir. 1999); United States v. Sun, 278 F.3d 302, 311 (4th Cir. 2002).

¹⁴⁷ Zhen Zhou Wu, 711 F.3d at 14 (quoting FCC v. Fox Television Stations, Inc., 567 U.S. 239, 253 (2012)).

¹⁴⁸ *Id*. at 15.

¹⁴⁹ Id. (quoting United States v. Lee, 183 F.3d 1029, 1032 (9th Cir. 1999)).

¹⁵⁰ Id. at 14-15.

¹⁵¹ *Id*. at 15.

and expertise being a factor in whether AECA and ITAR are presumed to give them sufficient notice is something that should be applied to the standard willfulness interpretation under the AECA, and not merely in voidfor-vagueness challenges.

If the court in Bishop had applied the void-for-vagueness standard espoused in Zhen Zhou Wu, it is very possible that Mr. Bishop could have avoided conviction. He was not a "sophisticated international businessman" and was merely shipping ammunition for his own consumption. He could not have been presumed to be an expert in the export of sensitive military supplies but was merely caught up in the overlyinclusive regulations, and was the victim of the application of an overlybroad willfulness interpretation.

The court in Zhen Zhou Wu also partially justified its ruling that "sophisticated international businessmen" cannot claim the AECA and ITAR are overly vague because the commodity jurisdiction process is in place to directly state whether an item is covered when asked by an individual or a business. 152 The commodity jurisdiction and the administrative opinion processes allow individuals and businesses to determine whether an item is controlled by the USML, but it does nothing for those people not part of the "relatively small group of sophisticated international businessmen." This justification for the use of a general intent requirement under the AECA does not hold up for those people, like Mr. Bishop, who are not part of the military supplier clique, and who would have just as little notice of the Commodity Jurisdiction and advisory opinion processes as of the services and articles controlled by the AECA and ITAR.

Further undermining the usage of the strict general intent interpretation utilized in Bryan with respect to people that are not sophisticated international businessmen is the existence of the administrative procedure. The most striking aspect of the administrative procedure is that it is strict liability. 153 The use of either criminal enforcement or administrative procedure to punish violations of ITAR and the AECA is up to the discretion of the Department of State, and the Department of State has used both simultaneously on offenders in the past. 154 The existence of the administrative procedure is relevant to the interpretation of the willfulness requirement in criminal enforcement because it represents an alternative way to punish unintentional violators. The administrative procedure, at least as it is laid out in ITAR, provides similar protections as the Article III courts, and its more frequent use against unintentional or less egregious ITAR violators would allow for a

¹⁵² Zhen Zhou Wu, 711 F.3d at 15.

^{153 22} U.S.C. § 2778(e).

¹⁵⁴ See generally Fried Frank, supra note 75, at 5-9.

more refined interpretation of willfulness that targets only those who should reasonably have notice of ITAR's restrictions.

It is up to the Supreme Court to hear the right case, preferably one like *Bishop*, where it can differentiate between these two groups of people, and not merely through dicta. The Court can accomplish this by making several key decisions. First, the Court should distinguish a case like *Bishop* from *Bryan* and recognize that the AECA, and its implementing regulations, ITAR, are complex regulations on par with the tax code. Because it should recognize that these regulations are complex, the Court should therefore find that violations of the AECA and ITAR are entitled to the exception from the interpretation of willful as signifying pure general intent, unlike the statute in question from *Bryan* (FOPA). Under this exception, the prosecution would need to prove that the defendant had knowledge of the regulations and, therefore the requisite notice for the violation to be willful. In this, the Court would interpret willful as requiring a finding of specific intent.

The Court should then temper its finding that the AECA requires a finding of specific intent to convict for a violation by finding that this only applies to those that are not "sophisticated international businessmen," or, more generally, those that should be able to infer from the regulations what is or is not prohibited. The Court should follow *Zhen Zhou Wu* in this finding, and adopt some of the reasoning from *Zhen Zhou Wu*'s void-forvagueness decision. In that section of the opinion, the First Circuit Court of Appeals stated that the intent requirement should be read as general intent due to the station and presumed expertise of the defendants. Implied in that conclusion is that knowledge of the regulations, or specific intent, would be necessary to convict a person not in a position to be familiar with the regulations. The Court should also recognize that the national security purposes of the AECA and ITAR would still be served by this because accidental or less egregious violators would still be subject to administrative enforcement, and violations under that process are strict liability.

The sophisticated international businessmen on the other hand, would be subject to a qualified general intent interpretation of the willfulness requirement. The general intent requirement would be qualified because the prosecution would first have to show that a reasonable person in the defendant's position would or should have been familiar with the pertinent parts of the regulation to be convicted for their violation(s). A sophisticated international businessman dealing with ITAR enough to be considered notified of its provisions would also presumably have notice of the Commodity Jurisdiction and advisory opinion processes, and therefore had recourse before choosing to violate the regulations.

Taking all of this into consideration, the end result of such a decision by the Court would be the promulgation of a two-part test. That test would ask: 1) would a reasonable person in the defendant's position be

aware of the provision they are accused of violating or know how to determine if their contemplated action would be a violation beforehand, if yes, then 2A) did the defendant act knowing that their action was unlawful, and, if no, then 2B) did the defendant know that their action was a violation of the ITAR provisions.

V. CONCLUSION

As it stands, the circuit courts have laid down varying interpretations of the willfulness requirement ranging somewhere on the spectrum between pure general intent and specific intent. Much of the confusion that has arisen from these various interpretations is due to the straining of "willful" to accommodate ITAR violators that are "sophisticated international businessmen" and ordinary people like Brian Bishop that get caught up in ITAR's vastly complex web of USML-controlled defense articles and services. The same level of intent and presumed knowledge should not apply to all ITAR violators. The Court should recognize that a "one size fits all" approach to interpreting the willfulness requirement in the AECA and ITAR is not workable, and that a test proposed in this article is the best way to punish those who should know better, and allow the Department of State's administrative procedure to deal with the accidental and innocent violators.

The Court should follow this article's suggestion of an amalgam of Bryan and Zhen Zhou Wu because it would represent justice for those charged under ITAR. It is worth noting that, if this test was used by the court in Bishop, it is unclear whether he would have been convicted. In the first part of the test, the court would have asked whether Mr. Bishop should have had knowledge that the ITAR provisions applied to the ammunition he was attempting to ship to his post in Jordan. The court mentioned that the information was contained in a pamphlet, but also noted that even the official in charge of preparing employees for their moves was not aware that the Department of State's prohibition was related to ITAR. Mr. Bishop himself stated that he believed that it was merely against the Department of State's regulations. The court itself did not delve too deeply into this issue, and did not explicitly state that he should have known that ITAR was involved. Instead, the court merely stated that he knew what he was doing was unlawful, and so upheld his conviction. Under this article's test, if the court had found that he was in a position to have notice of the regulations, on par with a sophisticated international businessman, then his conviction may have been justified if he knew his action was unlawful or just against regulations. On the other hand, if the court had determined that he was not in a position to be familiar with ITAR, then the court would have asked whether he knew he was violating ITAR regulations. If this were the case, it is very likely that he would have had his conviction overturned.

The end result of the test is not the concern here, but whether Mr. Bishop received a fair hearing under the pure general intent interpretation of the willfulness requirement. In his case, the court essentially found that it did not need to determine if he knew about the regulation, or if he even knew about ITAR at all, but instead skipped through this fact finding by applying the pure general intent interpretation. Under this article's test, Mr. Bishop could have received the fair hearing to which he was entitled.