*Israel Law Review* **49**(2) 2016, pp 197–236. © Cambridge University Press and The Faculty of Law, The Hebrew University of Jerusalem, 2016.
doi:10.1017/S0021223716000108

# Innovative Regulation through Competition: A Response to Rapidly Evolving Markets

*Ido Baum*[*]

*How can regulators keep up with sea changes in dynamic markets? This article proposes the use of competitive forces to generate innovative regulation. In markets where national, social, cultural, economic or other interests must be maintained in the face of evolving risks, heightened uncertainties and dynamic technological developments, regulators have to learn by doing.*

*This article proposes the novel concept of intra-regulatory competition (IRC), a powerful method for developing innovative regulatory solutions by staging a contest between different regulatory regimes imposed simultaneously on market participants in a given jurisdiction. The article describes the principles of and justifications for IRC, conditions for its effective implementation, its potential benefits and drawbacks. IRC is analysed against the backdrop of similar concepts such as randomised law, experimental law and inter-jurisdictional competition. Finally, the article argues that the regulation of media content in order to promote cultural pluralism and the regulation of computerised trading in securities and futures markets are fields that are ripe for and compatible with the application of IRC.*

**Keywords**: media pluralism, regulatory competition, regulation, innovation

## 1. Introduction

Competition can bring out the best in creative minds, which explains why it has always been a driver of innovation. One example of many creative rivalries is the contest between the two favourites of Florence, Michelangelo and Leonardo, culminating in a battle of brushes in 1504 as they both simultaneously painted competing frescoes on the walls of the Palazzo Vecchio, home of the Florentine city council. It is argued that Renaissance art would not have been the same without the emotional and spirited duel between the two.[1] Regulation can benefit from creativity and also from competition.[2] Unlike artistic painting, in which only human imagination and

[*] Vice Dean and Senior Lecturer, Haim Striks School of Law, College of Management Academic Studies (Israel). Parts of this article were developed during my term as Visiting Professor at the Georgetown Law Center for Transnational Legal Studies (CTLS). baumi@colman.ac.il.

I am grateful to my students and colleagues at CTLS for fruitful discussions in and outside the classroom. I am also grateful for comments from Victor Buganim, Ellen Goodman, Michael Halberstam, Robert Miller, Mariana Prado, Omer Tene, Michal Shur-Ofry, Tamir Shaanan and participants at the Canadian Law and Economics Association Conference 2015 and the European Law and Economics Association Conference 2015. I also thank the Academic Editor, Yaël Ronen, and the editorial team for excellent suggestions and comments at the final stage. This research received financial support from the Zvulun Hammer Research Foundation at the Israeli Second Authority for Radio and Television. All views expressed in this article and all errors remain those of the author.

[1] Jonathan Jones, *The Lost Battles: Leonardo, Michelangelo, and the Artistic Duel that Defined the Renaissance* (Simon & Schuster 2012). For a critical discussion on the role of competition in generating creativity see generally Margaret Heffernan, *A Bigger Prize: How We Can Do Better than the Competition* (PublicAffairs Books 2014).

[2] By 'regulation' I mean 'the intentional use of authority to affect behavior of a different party according to set standards, involving instruments of information gathering and behavior modification': Robert Baldwin, Martin Cave and Martin Lodge, 'Introduction: Regulation – The Field and the Developing Agenda' in Robert

the size of the canvas confine the next creative step, regulation is often confined by a multitude of factors, including existing legal structures, institutions, cost–benefit practicalities, path dependence and equality concerns. I will argue that even within such confinements there are conditions under which regulation should be created by a carefully crafted competitive process.

Innovative regulation is especially called for in markets characterised by inherent risks, uncertainties and dynamic technological developments, which reshape the landscape at an increasing pace but, at the same time, have an underlying imperative national or jurisdictional interest that cannot be abandoned. In such cases, regulatory 'learning by doing' is the only alternative to doing nothing.

Regulatory innovation is generally defined as the search for better, more refined, more effective regulatory tools, mechanisms and technologies.[3] Regulatory innovation is distinguished from regulatory invention in that it concerns regulatory ideas which have actually been implemented. Innovation is 'both a process and an outcome'.[4] I propose to use the forces of competition to generate innovative regulation within regulatory agencies as a means of introducing new regulation, in particular where a regulatory void exists.[5]

In order to propel the evolution of innovative regulatory solutions I suggest and develop a powerful process, to which I will refer as 'intra-regulatory competition' (IRC). Essentially, IRC suggests the imposition of different competing regulatory regimes on substantially identical constituencies of subjects within a given jurisdiction, for a limited duration, such that at the end of the competitive process a superior regulatory regime will emerge and then be imposed on the entire market as the sole regulatory regime. One could describe IRC simply as a process by which competing regulators are tasked – by design – with pursuing the same settled policy goals by developing and testing different means, all in order to produce a new and optimal method of regulation.

It is often argued that regulatory reforms and innovations are likely to succeed only if they are done 'correctly',[6] but it is very hard to ascertain what the correct regulatory solution is, particularly in circumstances of extreme uncertainty. Previous regulatory experience may be of use in the process of developing new regimes, but this is not always the case. First of all, regulators

Baldwin, Martin Cave and Martin Lodge (eds), *The Oxford Handbook of Regulation* (Oxford University Press 2010) 12, 12. For a slightly more intricate definition see Julia Black, 'What is Regulatory Innovation?' in Julia Black, Martin Lodge and Mark Thatcher (eds), *Regulatory Innovation: A Comparative Analysis* (Edward Elgar 2005) 1, 11 ('the sustained and focused attempt to alter the behavior of others according to standards or goals with the intention of producing a broadly identified outcome or outcomes, which may involve mechanisms or standard-setting, information-gathering, and behavior-modification'). For another definition see Jurgen Feick and Raymund Werle, 'Regulation of Cyberspace' in Baldwin, Cave and Lodge (eds), ibid 523, 525 (broadly defining regulation as 'the development and application of public or private rules directed at specific population targets').

[3] Black, ibid 3.

[4] ibid 7 ('innovations are enacted ideas; they are those which have made it through the political or organizational decision processes to implementation').

[5] The idea of injecting competitive components into the internal process of lawmaking and regulation is novel, although it follows and draws on the legal discourse regarding legal experimentation and inter-jurisdictional competition discussed below in Section 4.

[6] Karen Hult, *Agency Merger and Bureaucratic Redesign* (University of Pittsburgh Press 1987) 5.

sometimes face completely new challenges in which very little can be drawn from past experience. Secondly, it is often the case that regulating on the basis of past experience means regulating to mitigate problems that have already materialised rather than regulating in order to prevent future risks. Thirdly, regulatory processes tend to be incremental and are therefore less likely to anticipate or be able to confront major sea changes in the relevant market.[7]

Innovation can be the application of new solutions to old problems or of new solutions to new problems.[8] Either way, for creative regulation to happen, incentives for innovation need to be put to work. Obviously, IRC is an unusual technique for developing innovative regulation, considering the financial costs and legal complexities involved from the perspective of agencies and their regulated subjects. The drawbacks and complexities of IRC will be explored here in detail, along with the counter-arguments.[9]

I will assert that IRC can be particularly justified in cases of new regulatory challenges which have no conclusive existing regulatory solutions, or in rapidly changing markets in which existing regulatory answers have become obsolete. Some of the largest and most innovative companies in the world boast that they stimulate creative innovation by generating and structuring internal competition.[10] In essence, they are using Schumpeterian destructive innovation to hone their abilities and stay ahead of their competitors. Regulators can speed up their response to creative developments by using similar techniques.

Innovation theory points to a set of factors that increase the chance of productive innovation. These include a positive leadership attitude towards change, low centralisation, a high degree of knowledge and expertise, a high level of interpersonal connections between the members of the organisation, a risk-taking culture with a tolerance towards mistake and failure, a certain degree of slack and a less formalised attitude towards procedure.[11] The obvious tension between the procedural predictability that is required from governments and regulatory agencies as opposed to the informal slack of innovation processes underscores the fact that IRC should be time restricted and applied only in justified circumstances. Additionally, once an innovative regulatory regime prevails in the IRC process, its further implementation must meet the standards of administrative law. Arguably, the unique multi-party nature of IRC increases the probability of its legal

[7] John W Kingdon, *Agendas, Alternatives and Public Policies* (2nd edn, Pearson 2014) 79–80.
[8] Black (n 2) 9.
[9] See Section 5 below.
[10] Julian Birkinshaw, 'Strategies for Managing Internal Competition' (2001) 44 *California Management Review* 21, 21–22 (internal competition increases flexibility, challenges the status quo and motivates greater effort); Scott Bowden, 'Innovation Lessons from the Iron Dome', Innovation Excellence, 28 July 2014, http://www.innovationexcellence.com/blog/2014/07/28/innovation-lessons-from-the-iron-dome (suggesting that companies should stay ahead of their competitors by setting up internal teams to develop innovations that will disrupt their own products).
[11] Julia Black, 'Tomorrow's Worlds: Frameworks for Understanding Regulatory Innovation' in Black, Lodge and Thatcher (n 2) 16, 20. See also Heffernan (n 1) 30 ('Genuine critical thinking and innovation require that the mind be allowed to wander, to try out answers that don't work, to test concepts and, crucially, to make mistakes'); Kingdon (n 7) 84 (suggesting 'organized anarchies' as means of producing innovative policy proposals); ibid 206 (some good regulation is inevitably the product of accident or dumb luck).

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

legitimacy and political acceptance because of the professional and public consensus that is likely to emerge as a result of IRC's quasi-Darwinian process.[12]

Where should IRC be implemented? Regulatory failure[13] or obsolescence often triggers calls for deregulation. In some fields deregulation may be desirable, but where states wish to continue safeguarding important interests, the promise of IRC proposes to substitute voids and failures with creative innovation. In the final sections of this article I advance two claims about media and securities markets. The first is a positive claim, which asserts that media regulation for cultural pluralism is in advanced stages of obsolescence and that in securities regulation it suffers from particular voids. The second claim, a normative claim, is that these markets are ripe and suitable for IRC.

I will argue that audiovisual media content regulation is a particularly salient example of a field which justifies regulatory intervention through IRC processes, especially in small media markets. The importance of media in sustaining and enhancing democracies is undisputed,[14] but the media suffers from many market failures that require legal and regulatory intervention in order to guarantee the supply of the media content that citizens need.[15]

The market for financial instruments, such as securities and futures, is an example of a field which has been strongly affected by technological innovations such as computerised trading,[16] financial innovations and globalisation.[17] The fundamental interest in regulating the securities market is as crucial as ever, but there is doubt as to whether current regulation is at all relevant in addressing the new challenges of the financial markets. I will argue that this field is also ripe for IRC and that the initial institutional foundation for such a process exists in the United States (US).

This article is structured as follows. In Section 2 the contours of IRC are laid down and explained together with the conditions for its successful application. Section 3 discusses the justifications for the use of IRC and elaborates on its benefits. Section 4 compares IRC with other regulation strategies, such as randomised experimental law and inter-jurisdictional competition, and clarifies the differences between them. The caveats and drawbacks of IRC are discussed in Section 5 along with my responses to the critique raised therein. Finally, in Sections 6 and 7 I suggest two fields which I argue are compatible with and ripe for the implementation of an IRC process: (i) developing audiovisual media content regulation designed to enhance cultural pluralism, and (ii) creating innovative regulatory responses to the effects of computerised trading on securities markets. Section 8 concludes.

[12] Kingdon (n 7) 116 (the generation of policy proposals 'resembles a process of biological natural selection').
[13] Barak Orbach, 'What Is Government Failure?' (2013) 30 *Yale Journal on Regulation* 44, 55–56 (defining government failure as 'substantial imperfection in government performance' both in its action and as a result of inaction when the latter is required).
[14] Monroe E Price, *Media and Sovereignty: The Global Information Revolution and Its Challenges to State Power* (The MIT Press 2002) 238 ('Every country, even one committed to free speech principles, is engaged in some form of regulation or restriction relating to media').
[15] C Edwin Baker, 'The Media that Citizens Need' (1998) 147 *University of Pennsylvania Law Review* 317.
[16] IRC would be mostly valuable in fields characterised by rapid technological change and dynamic institutional evolution – eg, biotechnology, technology-driven network industries, big data and corporate finance: Black (n 11) 23.
[17] See Section 7 below.

## 2. THE INTRA-REGULATORY COMPETITION FRAMEWORK

This section lays out the basic framework for IRC. The fundamental idea is to induce at least two contestants to each develop and then implement a regulatory regime designed to achieve a particular policy objective within the legal ambit of the regulatory agency conducting and overseeing the process.

The basic requirement for IRC is a market with more than one regulated subject.[18] For example, a media market may include two commercial television broadcasters, each licensed to broadcast a channel containing local and foreign programmes. In an IRC process, each of these broadcasters may be subjected to a different regulator and consequently to a different regulatory regime.[19] Of course, the subject population may be larger; in fact, the larger the better. For example, two or more competitors may be charged with developing and implementing regulatory regimes for hundreds, or even thousands, of public corporations traded on a stock exchange.[20]

The stages of an IRC process are similar to the five stages of innovation.[21] During the first two preliminary stages, policy is defined and the performance gap between the policy objectives and the current outcomes of the regulatory regime – if there is one in force – is then explicated. At this point, IRC comes into play. Stage three requires the IRC contestants to propose innovative solutions to address the performance gap. During this stage, some discretion needs to be applied by the overseeing agency in order to discard proposals that are extremely costly, prima facie unlikely to succeed, or unacceptable for other reasons. It is also important to verify at this stage that the regulatory problem is defined properly so that the proposed solutions match the problem they are designed to solve. Afterwards, during the fourth stage, the selected contestants are assigned subject populations and begin implementation of the regime. At the fifth and final stage, an evaluation of the regimes is conducted and the regime that has most effectively and efficiently minimised the performance gap is singled out as the prevailing regime to be extended subsequently to the entire subject population.

The legal structure of IRC can be quite flexible. One can imagine a legislative act setting up two competing regulatory agencies, entrusted with an identical mandate, but each charged with regulating a different segment of the market.[22] However, because of the flexibility and potential need for dynamic oversight, it would make most sense to conduct IRC within the framework of

[18] I will use the terms 'subjects' and 'participants' to describe the regulated actors within the market, and the term 'contestants' or 'competitors' to describe the competing regulating parties.

[19] Applying IRC to markets with a small subject population has two drawbacks. The first is the difficulty of drawing conclusions on the basis of small samples. The second drawback stems from the fact that regulatory solutions that strive to build on competition between subjects may not be viable. Using the example in the text, it would not be possible to impose regulatory measures that build on competition between broadcasters if the IRC contestant is in charge of one broadcaster in a market comprising only two regulated entities.

[20] See Section 7.2 below.

[21] See generally Black (n 11) 21.

[22] Such a case exists in the securities regulation and commodity futures regulation in the US: see Section 7 below. Another example is the regulation of commercial broadcasting in Israel: see n 169.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

regulatory agencies.[23] Within an agency, it is possible to delegate the execution of policies to intra-regulatory bodies, teams, or individuals who will be tasked with developing innovative regulatory techniques. In the following sections I will address some key issues in the design of IRC.

### 2.1. Limiting Exit and Self-Selection

In the process of IRC, subjects should be randomly and equally distributed among the regulating contestants. IRC requires that the subjects of the developing and competing regulatory regimes are not able to opt out. The effectiveness of regulation is often highly influenced by the asset-specificity of the investment on the part of the regulated subjects. If the subject of the regulation is not attached to the regulated jurisdiction through specific investments that cannot be easily relocated to another jurisdiction, IRC processes might fail because subjects will prefer to migrate to another jurisdiction with seemingly more beneficial regulation. Preventing the exit of subjects from their assigned regulatory regime to another regime is a prerequisite for a successful IRC process.[24]

The main driver towards migration is the fact that IRC implicates the inherent risks of an unstable regulatory horizon. Instability emerges either because IRC contestants and regulatory subjects may naturally adapt to the changes in the regulated environment or as a consequence of exogenous forces – for example, policy choices in other jurisdictions. This is a drawback of IRC processes which must be considered and weighed in the final evaluation stage. However, this drawback should not be exaggerated. Even without using IRC as the tool for generating regulation, jurisdictions regulating under conditions of uncertainty are likely to produce different regulatory regimes and face the risks of subject migration. IRC can succeed only if subject participation is mandatory, but even if this is the case it would be difficult to completely prevent subjects from exiting to other jurisdictions.[25]

Another problem is that sophisticated subjects may try to strategically self-select into particular regimes. In order to avoid self-selection bias, the subjects themselves should not be able to decide which regulatory regime applies to them.[26] Nevertheless, the self-selection bias in IRC is less troubling than self-selection in experimental law.[27] The reason for this is that given uncertainty about the methodology and the efficiency of potential regulation, the subjects as well as the

[23] Zachary J Gubler, 'Experimental Rules' (2014) 55 *Boston College Law Review* 129, 147; Roberta Romano, 'Regulating in the Dark', Yale Law & Economics Research Paper No 442, 30 March 2012, 6, http://ssrn.com/abstract=1974148 (arguing that agencies are most suitable for institutions in government to develop complex regulation).

[24] Michael Abramowicz, Ian Ayres and Yair Listokin, 'Randomizing Law' (2011) 159 *University of Pennsylvania Law Review* 929, 975 (suggesting that mandatory participation will help in avoiding self-selection and attrition problems in experimental law, but conceding that some unavoidable attrition will always exist).

[25] Robert Baldwin, Martin Cave and Martin Lodge, *Understanding Regulation: Theory, Strategy and Practice* (2nd edn, Oxford University Press 2012) 360–61 (observing that regulatory competition creates unstable regulation).

[26] Abramowicz, Ayres and Listokin (n 24) 952–54.

[27] See Section 4.1 below.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

regulators may be hopeful but clueless about the consequences.[28] It therefore follows that subjects are less likely to engage in strategic regime selection and, even if they do, there is a good chance that this effort will be ineffective.[29] Nevertheless, random assignment should be imposed for the sake of *ex ante* equal treatment of the regulated subjects.[30]

### 2.2. POLICY OBJECTIVES AND EVALUATION

Legislative mandates for regulatory agencies may be complex,[31] and IRC goals must encapsulate these mandates in order to guarantee performance. The objective of the policy that is being subjected to an IRC process matters. IRC would be better used with policies that are intended to facilitate positive results rather than negative results.[32] For example, it would be better to generate an IRC contest when the policy implementation sought should produce more activity rather than to completely stop or to stifle activities or occurrences. The reason is simple: increased or decreased activity levels are easier to monitor and evaluate compared with estimating the occurrence of events if regulation had not been in force.

IRC processes must include criteria for evaluating the effects of the competing regimes.[33] It would be better to restrict IRC to fields in which the outcomes are likely to be at least identifiable, if not directly visible and measurable. Service industries tend to be better targets for competitive regulatory processes because the effects of regulation are visible – in either the products, the services or various disclosure and transparency requirements – making regulatory races to the top more likely.[34]

### 2.3. DURATION

The duration of the IRC is one of the most challenging implementation issues. An IRC process is broadly composed of two time frames. In the first, IRC contestants need to come up with the

[28] It is often argued that subjects have superior knowledge compared with regulators, certainly with regard to the particular effects of regulation on their own behaviour. If this is the case then indeed self-selection should be prohibited.

[29] Another justification concerns the fact that in many cases market actors possess more information than the regulators about the particular implications that a regulatory regime will have on them. Hence, even if such private information is inconclusive and incomplete, it may still generate strategic behaviour that could result in bias in the desired process.

[30] For a deeper discussion of equal treatment concerns, see Section 5.3 below.

[31] A good example for this is the complex mandate often imposed on media regulators, discussed in Section 6.1.2. Sometimes regulatory mandates are simple in their policy goal but complicated to implement in reality. This seems to be the case with regard to securities regulation which simply strives to protect investors, but its implementation is highly sophisticated: see Section 7.2 below.

[32] Abramowicz, Ayres and Listokin (n 24) 962 ('policy makers should experiment with policies that have relatively positive expected effects').

[33] Romano (n 23) 19–21 (advocating that sunsetting processes are crafted to include evaluative criteria and that they are evaluated by independent experts, with adequate funding).

[34] Baldwin, Cave and Lodge (n 25) 364. Conversely, the regulation of services such as financial gatekeepers is less suitable for IRC because of the invisibility of measures that yield successful error prevention.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

proposed regime. The duration of this part matters only in so far as the regulation is urgent. Naturally, the more time the contestants have in which to develop and mould their proposed regulatory strategies, the better. The development of regulatory reforms, from the seed stage to the point at which they are ready for implementation, can take a short period of time, but may also last for years.[35] The time required for moulding reforms into operational regulation or law depends on the complexity of the subject-matter, opposition from interest groups, public involvement in the process, and political pressures. Reform processes are prolonged by the mere fact that they are designed to change existing regulation and yet they do not or cannot guarantee that the change will be positive in terms of policy outcomes.

Similar obstacles may emerge in the process of setting the stage for IRC implementation. However, in the case of IRC these factors are less likely to stall the process. First, if IRC is called for in the absence of any regulation or after regulatory breakdown, the opposition is likely to be weaker or dispersed. Second, to the extent that interest groups exist, the multi-party nature of IRC can enable their incorporation into the developmental stage and dismantle objections and stalling tactics.[36]

Sunset provisions are perceived to be a fundamental and advantageous characteristic of experimental rules.[37] The second time frame, in which the regimes are imposed for a limited period of time on the randomly chosen subjects followed by a sunset mechanism, requires delicate calibration. If the duration is too short, temporary regulatory regimes may fail to capture the long-term effects of the new regulation and the ability of subjects to react dynamically to a change in regulation.[38] Therefore, an IRC process may just as well last several years.[39] However, when policies have unknown pay-offs, it would be harder to justify their imposition over a long period of time without a guarantee that they will eventually expire.[40] In addition, the more disparate the regulatory regimes and the burden they impose, the less that subjects will be willing to accept the legitimacy of the process for a long duration. The legitimacy of IRC processes will be inversely related to the degree of difference between the competing IRC regimes, assuming that the burden of the regimes will be felt by the subjects of the regulation at a relatively early stage of the process. On the other hand, the outcomes of the IRC may not be visible immediately. In such a case, compensation mechanisms should be installed to guarantee equal treatment at the end of the process and diffuse early-stage opposition.

The decision about the length of the process can be relegated to a predetermined meta-regulatory agency or an internal IRC referee that will supervise the IRC process; in such a

[35] Avi Ben-Bassat, 'Conflicts, Interest Groups and Politics in Structural Reforms' (2011) 54 *Journal of Law and Economics* 937, 940–41 (some reforms are implemented immediately but some take years).
[36] The random assignment of regimes also reduces opposition: Ori Aronson, 'Forum by Coin Flip: A Random Allocation Model for Jurisdictional Overlap' (2014) 45 *Seton Hall Law Review* 63, 80 (randomisation sterilises the decision-making process by eliminating human discretion).
[37] Gubler (n 23) 141.
[38] Abramowicz, Ayres and Listokin (n 24) 956 ('a temporary law may be a poor proxy for long-term effects because the law will have both dynamic and static effects'). On the other hand a lengthy process exacerbates the inequality and decreases the value of collected information as a result of spillover effects: ibid 978.
[39] ibid 993 (arguing that an experimental repeal of the Sarbanes Oxley Act should be extended over a period of several years).
[40] Gubler (n 23) 130 (supporting the use of sunset mechanisms in experimental laws with uncertain pay-offs).

case there is no need to set a duration limit in advance, and the cut-off decision will be at the sole discretion of the referee. Considerations that may guide such a cut-off decision include, inter alia, the failure of a competing regulatory regime or the strict and uncontroversial superiority of one regime over the other, or the accumulation of sufficient information for analysing the long-term implications of the developing policies vis-à-vis the goals they are intended to meet.

### 2.4. INCENTIVES

IRC must produce sufficient motivation for the contestants to invest in innovation; otherwise, they may shirk or collude.[41] One possible incentive for the contestants could be promising the developers of the superior regulatory regime long-term benefits such as a career role as implementers of the policy.

The assumption that career considerations could motivate better regulation is an acceptable premise in public choice theory.[42] This type of carrot is analogous to the monopoly granted to the developer of an invention through a patent regime. A patent guarantees the inventor a monopoly over the revenue stream from the invention for a given period, provided that the inventor actually moves to implement the invention. In addition to this incentive, granting the 'winner' of the IRC a career role of implementing the superior policy increases the incentive to develop a policy that has sustainable effectiveness, because the victorious regulator will have to continue to implement this regime throughout the next stage of his or her career.

Professional career incentives may reduce the problem of politicisation of regulation, which is one of the main concerns raised by Stephen Breyer,[43] because political gains will be substituted by non-political benefits that will motivate professional rather than political actors to participate in innovative rulemaking.

The design of career-based incentives should take into account at least two significant factors. The first is the length of the average career of a regulator in similar roles. Guaranteeing the winner a long-term career would be futile if the average regulator prefers to serve a short term in that position and then advance to another position or switch to the private sector. Another factor that must be considered is the material and reputational benefits associated with the career prize. The lower the relative benefits, the lower the motivation to invest in innovation.

[41] There is evidence to support the assertion that competition between regulators advances regulatory vigour. Regulators are not always looking to expand their power and jurisdiction when they enjoy a de facto monopoly. As an anecdotal example, in 1974 the Securities and Exchange Commission (SEC) refused the offer by the US Congress to be given regulatory jurisdiction over the commodity futures markets: John D Benson, 'Ending the Turf Wars: Support for a CFTC/SEC Consolidation' (1991) 36 *Villanova Law Review* 1175, 1175.

[42] Gubler (n 23) 132 fn 16; Michael E Levine, 'Why Weren't the Airlines Reregulated?' (2006) 23 *Yale Journal on Regulation* 269, 273; Kingdon (n 7) 123 (arguing that personal interests like keeping one's job, expanding one's agency, promoting one's career, as well as also promoting one's values are incentives to advocate proposals); cf Heffernan (n 1) 29 (arguing, in the context of stimulating learning in children, that tangible rewards crowd out intrinsic drive).

[43] Stephen Breyer, *Breaking the Vicious Circle: Toward Effective Risk Regulation* (Harvard University Press 1993) 56.

Finally, the assumption that the developers of an innovative regulatory regime are necessarily its optimal implementers is by no means always correct. Some authors suggest that the opposite is true,[44] namely that creativity and management skills are negatively correlated. Hence, a superior regulatory regime may fail if it is executed by individuals who lack the appropriate capabilities for implementation. Agencies should take this risk into account and, where relevant, award an alternative prize to the developers of the superior regulation and entrust the execution of the regime to more capable hands.

## 3. JUSTIFYING INTRA-REGULATORY COMPETITION AS A TOOL FOR REGULATORY INNOVATION

What are the underlying circumstances that justify the use of an extraordinary mechanism, such as IRC, as a measure for the creation of innovative regulation?

First, IRC is in line with the effort to improve the efficacy of regulation. The literature on regulation highlights the core principles underlying the trend towards better regulation, including the ongoing efforts to improve regulation by rational policymaking while simultaneously aspiring to devise less intrusive regulation.[45] It is important not to confuse the discussion about the inherent efficiency of regulation with the objectives of regulation. In the case of the latter, it is increasingly accepted that civic goals and societal values – for example, promoting diversity and furthering collective aspirations – can and should justify regulatory intervention.[46]

Second, the need for regulatory innovation is particularly relevant in fields that experience dynamic global and technological developments because of turbulent changes in the risks that threaten the desired policy goals. The role of regulation, among other things, is to identify,[47] mitigate[48] and build resilience to these risks.[49] However, the more dynamic the market, the less effective a standard one-shot regulation becomes.[50]

Third, in terms of reducing risk, financial investment in capital and investment in regulatory capital are analogous. Both forms of investment are safer when a strategy of diversification is applied to the investment decision.[51] Global players in the business of capital investment sometimes choose to diversify their investments across jurisdictions in order to immunise their

[44] Black (n 11) 20 ('the conditions which are necessary for innovation are those which impede implementation').
[45] Robert Baldwin, 'Better Regulation: The Search and the Struggle' in Baldwin, Cave and Lodge (eds) (n 2) 259, 263 (discussing the OECD reports on better regulation).
[46] ibid 260.
[47] Baldwin, Cave and Lodge (n 25) 93.
[48] ibid 83.
[49] ibid 94.
[50] For an argument regarding the impossibility of governing dynamic institutions with standard governance methods see Caryn Devins and others, 'Against Design' (2015) 47 *Arizona State Law Journal* 609, 610–11 (arguing that 'governance must be considered in the light of creative dynamics' because institutions change in unpredictable ways and therefore 'it is impossible to ensure fairness by striking a one-time bargain from behind the Rawlsian veil of ignorance').
[51] Romano (n 23) 12 ('Risk management in today's context of large and interconnected financial institutions and complex financial instruments must grapple with unknown and unknowable, and not simply known, risks').

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

portfolio against under-performing legal systems.[52] Similarly, regulators required to operate under conditions of uncertainty will be wise to diversify. From a social welfare perspective, it would make sense under such conditions to invest in a diversified competitive strategy of regulation rather than to try one regulatory regime at a time.[53] This is because (i) experimenting with one uncertain regime at a time is more risky than diversification; (ii) even if some of the competing regimes eventually fail, the multi-party process of analysing and experimenting generates more learning and more information than similar brainstorming processes, and therefore serves to improve the chosen regime;[54] and (iii) developing more than one regime will minimise the regrets often associated with the discovery of a road not taken and help to silence parties that have an interest in questioning the prevailing regime. It is a consensus-building process as much as it is a developmental process. Hence, IRC is the most powerful and efficient process to apply learning-by-doing because it simultaneously generates and tests more regulatory knowhow than sequential experiments conducted on segments of the market or even on all of the market.[55]

Fourth, market efficiency theories cement the justifications for IRC because there is an intrinsic efficiency characteristic in IRC compared with other regulation development strategies. Regulators are usually monopolists and therefore, if they are not subject to some form of control, may not produce optimal regulation.[56] Regulators may shirk or produce methods of regulation that are hard to evaluate unless they are certain of the efficacy of their own performance. Additionally, even efficient, well-intentioned regulators may fail to develop innovative solutions as a result of 'tunnel vision'.[57] IRC introduces contestability to regulation,[58] which means that it reduces the deadweight loss to society from the inefficiencies of monopolistic regulators. Competitive regulation means, in fact, adopting a market solution for innovative regulation.[59] Not surprisingly, harnessing contests to improve government is not unprecedented.

[52] Kelli A Alces, 'Legal Diversification' (2013) 113 *Columbia Law Review* 1977, 1980–81 (defining legal diversification as the strategy of 'building a portfolio of securities that are governed by a variety of legal rules' for the purpose of protecting the investor against the risk that a particular jurisdiction's method of minimising agency costs will turn out to be ineffective).

[53] Romano (n 23) 26 (regulatory experimentation and diversity are 'safety valves' against both dynamic regulatory environments and systemic errors).

[54] Aronson (n 36) 98 (arguing that 'institutional heterogeneity' can infuse more information into political discourse and institutional design processes and is 'often necessary means in any experimental process testing the utility of a novel policy idea').

[55] Gubler (n 23) 143; Aronson (n 36) 67 ('Randomizing forum selection means that, over time and given a sequence of random allocations, similar questions and similar fact patterns will reach divergent forums and be treated differently, thus producing a pluralism of judicial output, as well as an information-generating dynamic reminiscent of randomized experiment methods'); Holly Doremos, 'Precaution, Science, and Learning While Doing in Natural Resource Management' (2007) 82 *Washington Law Review* 547, 573.

[56] On the other hand, see generally Nicholas Bagley and Richard L Revesz, 'Centralized Oversight of the Regulatory State' (2006) 106 *Columbia Law Review* 1260 (there is no evidence that agencies generally over-regulate or under-regulate).

[57] Susan E Dudley and Jerry Brito, *Regulation: A Primer* (2nd edn, George Mason University 2012) 61 (citing Stephen Breyer).

[58] Baldwin, Cave and Lodge (n 25) 470–75 (discussing the importance of contestability).

[59] Cento Veljanovski, 'Economic Approaches to Regulation' in Baldwin, Cave and Lodge (eds) (n 2) 17, 30–31 (favouring market-based solutions for market failures).

Governments recognise that contests and prizes can be an effective way to promote the development of innovative policies and solutions to modern challenges. A good example is section 105 of the America COMPETES Reauthorization Act 2010, which added section 24 (Prize Competitions) to the Stevenson-Wydler Technology Innovations Act 1980, granting federal agencies the authority to award prizes in order to stimulate innovation which has the potential to advance the agency's mission.[60]

Fifth, regulation theorists sometimes view regulation in contractual terms, as the result of a process of negotiation between the regulators and the subjects of regulation.[61] If this is the case, then structuring a competition for innovative regulation could enhance the contractual welfare results for the public, particularly in the face of uncertainty, because parties have a chance to reveal the uncertainties about which they are concerned at an earlier phase of the regulatory development process.[62]

Sixth, it is conceivable that IRC will be suggested as a regulatory response to crisis. Political and public reactions to crisis often call for more regulation. This type of demand emerges, inter alia, when existing regulation turns out to be obsolete in a regulated environment that is highly dynamic.[63] Crisis-driven regulation is hotly debated in the literature and often criticised for lacking a proper analytical and empirical basis.[64] Roberta Romano discusses post-crisis situations in which, despite the failure of existing regulation, incumbent regulators or lawmakers believe that they hold the solutions to prevent similar crises in the future. Romano is probably the most outspoken critic in voicing the concern that the belief of regulators and lawmakers in post-crisis reforms is misguided or outright wrong. Romano also cautions against 'policy entrepreneurs' who propose their 'preexisting preferred policies' as the best solutions to a crisis,[65] along the lines of Winston Churchill's famous quip 'Never let a good crisis go to waste'. Indeed, popular opinion and political interests often try to persuade us that regulatory reform would be a solution to all our woes,[66] but this is rarely the case. Many post-crisis reforms focus on resolving the weaknesses of previous failures, and sometimes fail to foresee future risks. Romano therefore proposes the insertion of review mechanisms in post-crisis regulation. Concerned not with

[60] On the implementation of the legal initiative see US Federal Office of Science and Technology Policy, 'Implementation of Federal Prize Authority: Fiscal Year 2013 Progress Report', May 2014, https://www.whitehouse.gov/sites/default/files/microsites/ostp/competes_prizesreport_fy13_final.pdf.

[61] Cento Veljanovski, 'Strategic Use of Regulation' in Baldwin, Cave and Lodge (eds) (n 2) 87, 91–92.

[62] This depends on whether parties can inexpensively escape their contractual obligations. If parties know that they will be strongly committed to their contractual obligations they will have an incentive to contemplate their potential private risks of the contract *ex ante* and to share this information with the other party: see discussion in Section 4.2 below.

[63] Romano (n 23) 2 ('Financial firms operate in a dynamic environment in which there are many unknowns and unknowables and state of the art knowledge quickly obsolesces').

[64] See generally Romano (n 23). For an example of the haphazard crisis-driven regulatory solutions to the 2008 financial crisis on Wall Street see James B Stewart, 'Eight Days – The Battle to Save the American Financial System' *The New Yorker*, 21 September 2009, http://www.newyorker.com/magazine/2009/09/21/eight-days?currentPage=all (indicating that some nationally crucial regulatory decisions were based on scant information and gut feelings).

[65] Romano (n 23) 4.

[66] Hult (n 6) 4.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

experimental regulation but with the fact that post-crisis regulation will be burdensome and unjustified 'quack regulation', she proposes the inclusion of procedural mechanisms of review and reconsideration as part of such regulation and to encourage, where possible, 'small scale, discrete experimentation'.[67]

IRC can mitigate Romano's concerns in several ways. First, IRC can be initiated in a pre-crisis situation, when a need for regulation emerges in a new field but before an actual crisis occurs. Hence, the main effort of IRC contestants in the development stage will be to foresee the potential risks and pitfalls rather than regulating in the shadow of earlier traumatic events. Second, if IRC competitors are later bound to long-term implementation of the innovative regulation they have developed they will have a particularly strong incentive to foresee long-term risks and confront them in their regulatory regime. Finally, IRC can test the policies proposed by policy entrepreneurs vis-à-vis competing proposals in a real-life setting.

One caveat should be interjected with respect to the latter point. IRC can be a powerful force and it therefore must be initiated under the proviso that IRC contestants are tasked with a combined goal of minimising the risk of a future crisis while, at the same time, minimising costs to taxpayers and to the subjects of the regulation. Without this combination of restrictive stipulations on the contestants' objective function, the power of competition may yield a worse result under IRC than would have been achieved under regular post-crisis regulation. This is because without such checks and balances the competitive forces and the natural conservative nature of regulators are likely to result in regulators gravitating towards costly and burdensome regulation.

Finally, IRC has the benefit of introducing a form of scientific proceduralism to a process of regulation under circumstances of severe uncertainty.[68] Unlike inter-jurisdictional competition, in which every competing jurisdiction tries to attract as many 'clients' as possible to its ambit of regulation,[69] IRC is concerned with developing results that enhance social welfare as its primary function, and is thus more similar to competition between scientific researchers. Researchers sometimes race towards the same objective, which, in the scientific race, could be the development of a cure for a particular illness, for example. Eventually one developer will be the first to discover the curing formula, and hopefully also be the first to register the discovery as a patent. However, all competing researchers will have exerted efforts and costs in the race. The costs incurred by the 'losing' researchers are not necessarily wasted[70] because they may eventually independently develop better ways of curing the illness; this means they, too, will be able to register their discovery and then have their patents compete in the market for medication. Even if the competing researchers do not end up with a registered patent, the information acquired in the research and development process improves cumulative existing knowledge and may be used elsewhere. The same holds for the results of IRC.

[67] Romano (n 23) 3.
[68] Baldwin, Cave and Lodge (n 25) 101.
[69] See Section 4.2 below.
[70] Resources may be wasted in the race to register the patent but the research race in and of itself is not necessarily wasteful.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

## 4. SIMILAR COMPETITIVE REGULATION MODELS

### 4.1. RANDOM AND EXPERIMENTAL LAW

In recent years arguments have been made in the literature in support of randomising within the law and experimenting in law.[71] These two theories are closely related and have some common elements with IRC. In this section I explore the similarities and differences between IRC and these two theories.

Randomised experiments, involving a treated group and a control group, are a good way to resolve a debate on whether a proposed regulation may work better than an existing regulation by either (a) subjecting a group of subjects to a proposed new regulation, or (b) by imposing the new regulation on the market and then exempting a group of subjects so that it becomes the control group.[72] Randomising law focuses on the imposition of a regulation on randomly selected subjects as opposed to the entire subject population, whereas experimental law stresses the sunsetting element – namely, that regulation is imposed on all subjects for a defined time span, which alleviates the apprehension of lawmakers with respect to costly regulation with unknown results.[73]

IRC is distinguishable from both regulation methods, although it incorporates and builds on some of their fundamental traits. It builds on randomising regulation in that it is fundamentally a real-life experiment in regulatory solutions. However, the existing literature on experimental random regulation focuses on testing already proposed but contested regulatory solutions. IRC aims to tackle regulatory voids that are so fraught with uncertainty that both regulators and lawmakers prefer to avoid their regulation altogether in spite of the fact that there are strong reasons to apply a regulatory regime to the pertinent field.

Using the analogy between IRC and laboratory experimentation, existing literature on experimental and random law deals with the stage at which the treatment has already passed laboratory trials and is now ready for human testing. In essence, IRC deals with a situation where the patient cannot wait for laboratory testing and animal testing is unacceptable. Of course, IRC would also be useful when regulatory policies do exist, but it is impossible to rank them in terms of superiority and efficiency because of the intensity of regulatory unknowns.[74]

Zachary Gubler claims that only a miniscule part of regulation is experimental in nature in spite of the fact that using experimental mechanisms makes sense.[75] This scarcity of experimental legislation is explained, inter alia, by the fact that such regulation may be less favoured by well-organised interest groups.[76] IRC, as it is proposed here, can dissipate some of the objections of such interest groups or succeed in spite of potential opposition. For example, in emerging fields

[71] See generally Abramowicz, Ayres and Listokin (n 24); Gubler (n 23) 129.
[72] Romano (n 23) 29.
[73] ibid 14–15 (favouring the use of sunsetting for regulation under conditions of uncertainty because it 'loosens the institutional stickiness' and enables the incorporation of post-enactment information).
[74] Abramowicz, Ayres and Listokin (n 24) 931 ('regression analysis of policy is often fraught with complications').
[75] Gubler (n 23) 131 (observing that less than 1% of the laws are experimental in nature).
[76] ibid 132.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

of regulation, coalitions and interest groups may not be fully organised; thus, IRC is likely to encounter less opposition. On the other hand, in fields in which regulation has become obsolete, the introduction of IRC may benefit existing interest groups because existing market actors sometimes suffer from the costs of obsolete and ineffective regulation, whereas new entrants may have found ways to avoid this regulation and supply their products at lower than the pre-existing competitive prices.[77]

The mechanism of regulatory experimentation proposed by Romano in the context of regulating global financial markets is similar to IRC in some of its stages. Romano suggests that regulators start with a regime backed by econometric or formal modelling; include a review process, ongoing monitoring and periodic reassessment; and finally make all the information collected in the process available for public scrutiny.[78] IRC follows this model with the fundamental exception that the suggested regulation is likely to be far more loosely backed by formal or empirical data, given the uncertainty and novelty of the regulation. IRC in itself is a method of generating and collecting information. The periodic review process would focus primarily on whether sufficient information about the competing regimes has been accumulated in order to evaluate which is the superior regime. Eventually, in IRC the law should ensure that the superior regime is actually adopted and that knowhow from the overall IRC process is implemented in the adopted regime.

A drawback that proponents of experimental law face is the impossibility of applying the 'double-blind' standard of experiments. The double-blind standard is the purest form of unbiased experimentation in that it prevents both the researcher and the subjects from knowing which treatment is being administered.[79] Indeed, whereas double-blindness is a major component of experimentation, it is not present in IRC. However, IRC is not experimental but rather is developmental in its nature; therefore, the fact that the subjects know and may react to the regulation imposed on them is not necessarily a drawback. Nevertheless, at least at the initial stages, the subjects may be as blind to the implications of developing regulatory regimes as are the competing regulators in applying the regimes. Conversely, the subjects of IRC that do have private information about the efficacy of a certain regulatory regime have an incentive to share at least some of it – information that will lower the imposed costs of regulation – with the regulator, thereby improving the cost-effectiveness of the regulation.

IRC has an advantage over randomising law in that it can be applied on both large and small scales. Whereas randomising law requires the identification of similar large-scale groups of

[77] The media market is a case in point, where existing linear broadcasters found themselves bound to national regulation whereas new non-linear web broadcasters were free from this regulation while providing similar content. The Israeli case serves as a representative example: Ido Baum, *Media Law in Israel* (Kluwer 2014) 35 ('The existing regulation of audio-visual content does not apply to online broadcasting'); Feick and Werle (n 2) 534 (discussing the challenge posed by the internet to traditional legal forms of regulation).

[78] Romano (n 23) 26–27.

[79] Abramowicz, Ayres and Listokin (n 24) 948–51 ('In randomized tests on laws and public information, it will be harder to keep subjects in the dark about how they are being treated or the fact they are subjects in an experiment').

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

subjects,[80] IRC can be applied to significantly smaller constituencies. Even in markets in which there are only a few competing firms, as is sometimes the case in highly regulated network industries, IRC may be applicable. Of course, applying IRC in small-scale markets is not optimal in terms of drawing meaningful results about the efficacy of innovative regulation, but it is important to bear in mind that the primary role of IRC is to create a process for the development of non-existent regulation.

Compared with experimental law, an IRC initiative to generate a race towards the most efficient regulation has the additional benefit of creating positive externalities.[81] Knowledge acquired through the experience of one regulatory regime may be later implemented to improve the prevailing regime, in a process of cumulative knowledge generation.[82] IRC has an advantage in that it produces information about more than one regulatory regime at the same time, and the information about the competing regimes is simultaneously comparable. On the down side, particularly if dynamic and reactive regulation is allowed, the information is likely to be less accurate and less conclusive compared with random experimental regulation.

### 4.2. INTER-JURISDICTIONAL COMPETITION

Another strand of regulation literature deals with inter-jurisdictional competition – sometimes referred to as 'international regulatory competition' or 'federalism' – as a mechanism that creates state-level laboratories of innovative regulation.[83] In this context, the term 'regulatory competition' is often used to define a situation in which states or other smaller jurisdictions 'vie with each other to retain or attract investment within their jurisdictions by adjusting their regulatory regimes, and firms engage in regulatory arbitrage by moving capital or relocating accordingly'.[84] This type of competition has been heralded as an important mechanism for producing innovative regulation.[85] On the other hand, some scholars argue that global harmonisation and integrated

[80] ibid 974 ('the sample should be large enough to generate meaningful results') but cf Romano (n 23) 28 (supporting randomised regulatory experiments but only on a small scale).

[81] In that sense IRC operates much like intellectual property rights regimes that deal with the production of knowledge or information: see generally Joseph E Stiglitz, 'Economic Foundations of Intellectual Property Rights' (2008) 57 *Duke Law Journal* 1693.

[82] Assuming there is no intellectual property protection for innovative regulatory regimes, cumulative innovation is maximised by the IRC process. However, from an incentive point of view, it would be useful to reward IRC competitors that did not develop the prevailing regime if the knowledge they produce turns out to be meaningful in improving the prevailing regulation. On the cumulative nature of innovation regimes and the importance of cumulative innovation to the creation of knowledge see Suzanne Scotchmer, 'Standing on the Shoulders of Giants: Cumulative Research and the Patent Law' (1991) 5(1) *The Journal of Economic Perspectives* 29; Peter Menell and Suzanne Scotchmer, 'Intellectual Property' in A Mitchell Polinsky and Steven Shavell (eds), *Handbook of Law and Economics* (Elsevier 2007) 1473.

[83] Abramowicz, Ayres and Listokin (n 24) 947 ('Federalism may be more conducive to experimentation than the alternatives').

[84] Thomas Gibbons, 'The Impact of Regulatory Competition on Measures to Promote Pluralism and Cultural Diversity in the Audiovisual Sector' (2006) 9 *Cambridge Yearbook on European Legal Studies* 239, 240.

[85] This perception is an offspring of the famous metaphor of federal states as laboratories of democracy, attributed to the dissenting opinion of Justice Louis Brandeis in *New State Ice Co v Liebmann* 285 US 262 (1932) 311 ('It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a

regulation is better than competition.[86] While this may hold true in some areas of regulation, particularly when there is at least some degree of agreement on what are the 'correct' methods of regulation, it is not a viable approach when the regulation is obsolete or non-existent. Harmonisation and stability become less relevant the more the market becomes fraught with uncertainties and unknowns.

Inter-jurisdictional competitive rulemaking is an imperfect solution for regulating new fields, to say the least.[87] Inter-jurisdictional regulatory competition often generates regulatory arbitrage: subjects choose the privately beneficial but not necessarily the social welfare-enhancing regulatory regime by exiting from the regulating jurisdiction and migrating to the desired jurisdiction.[88] In fact, as opposed to IRC, for regulatory competition to work subjects must be able to exit from the regulated jurisdiction and migrate to a competing jurisdiction fairly easily.[89] However, the jury is still out as to whether inter-jurisdictional regulatory competition creates a race to the bottom or a race to the top.[90] A finer observation asserts that regulatory competition yields convergence towards either a less strict common denominator or towards the most stringent regulation – if any convergence happens at all. Arguably, regulation affecting production costs converges to the least strict common denominator because market participants exert pressure on regulators to reduce the cost of regulation. On the other hand, regulation affecting access to the market tends to be stringent because it insulates domestic competitors against foreign competitors.[91] Hence, there is indecisive evidence as to whether inter-jurisdictional regulatory competition will improve regulation and, either way, it may fit only particular types of policy.

laboratory; and try novel social and economic experiments without risk to the rest of the country'). Notably, Justice Brandeis realised that experimentation of the sort discussed here is risky in nature and requires courage on the part of those undertaking it. IRC might be riskier than Brandeis's conception of experimentation because IRC does not compartmentalise the risks to one state; thus, IRC should be applied restrictively.

[86] Luis Garicano and Rosa M Lastra, 'Towards a New Architecture for Financial Stability: Seven Principles' (2010) 13 *Journal of International Economic Law* 597 (arguing in favour of integrated supervision of financial markets, securities, banking and insurance, because synergy and coordination are more important than creativity and innovation).

[87] Baldwin, Cave and Lodge (n 25) 356 ('Regulatory competition involves the competitive adjustment of regulatory regimes in order to secure some advantage').

[88] For a definition of regulatory arbitrage and an explanation of how this phenomenon undermines the rule of law see generally Victor Fleischer, 'Regulatory Arbitrage', Colorado Legal Studies Research Paper No 10–11, 4 March 2010, 2.

[89] Baldwin, Cave and Lodge (n 25) 359.

[90] ibid 357–66; Mathis Koenig-Archibugi, 'Global Regulation' in Baldwin, Cave and Lodge (eds) (n 2) 407, 414 (the empirical evidence to support the hypothesis that international competition creates a race to the bottom is scarce); William L Cary, 'Federalism and Corporate Law: Reflections upon Delaware' (1974) 83 *Yale Law Journal* 663 (federalism creates a race to the top), and its progeny, eg, Roberta Romano, 'Empowering Investors: A Market Approach to Securities Regulation' (1998) 107 *Yale Law Journal* 2359. For an example of the opposing view see Lucian Arye Bebchuk and Allen Ferrell, 'Federalism and Corporate Law: The Race to Protect Managers from Takeovers' (1999) 99 *Columbia Law Review* 1168 (federalism creates a race to the bottom from the shareholders' perspective); cf William W Bratton, 'Corporate Law's Race to Nowhere in Particular' (1994) 44 *University of Toronto Law Journal* 401.

[91] Dale D Murphy, 'Interjurisdictional Competition and Regulatory Advantage' (2005) 8(4) *Journal of International Economic Law* 891; Gibbons (n 84) 241–42.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

Disallowing exit options forces the subjects to interact with the regulators and share at least some information if they want to affect the calibration of the regulation. This is a significant advantage for IRC over competition between jurisdictions in which subjects of regulation may exit from the jurisdiction without having to share information with the previous regulator about the reasons for the exit and the possible changes that could have prevented that result.[92]

There are additional reasons to suspect that inter-jurisdictional regulatory competition is not always an optimal technique for producing innovative regulation. States may not invest in innovating regulation, but rather prefer to free-ride on the investment of other states.[93] The free-rider problem means that innovative regulation overall will be suboptimally produced. Furthermore, small countries may be particularly prone to under-investment because of the relatively limited resources and the seemingly cheaper solution of imitating regulation developed by others.[94] This also means that innovative regulation is likely to be produced by larger jurisdictions and consequently be more compatible for larger countries than smaller ones.

## 5. Limitations and Weaknesses

Innovation can be good but it can also turn out to be counter-productive.[95] The risks and downsides of IRC are similar to those of other randomised regulatory experiments with sunset provisions. For example, economically rational subjects may compromise the experiment by strategic behaviour.[96] However, at least when IRC is restricted to situations of regulatory void, as suggested here, the potential for strategic manipulative behaviour is lower compared with other methods of regulation because the subjects are likely to be as uncertain about the outcome and impact of the regulation as the developers of the policy; therefore, the subjects' altered behaviour may result in a costly move with an unknown pay-off. The precondition of exit prevention in IRC also reduces the ability of subjects to react strategically and increases their motivation to voice their disagreement with the policies, thereby generating more information for policymakers.[97] This section further elaborates on the weaknesses and limitations of IRC, offers counter-arguments, and addresses possible critique.

### 5.1. Innovation Costs

Reducing costs is always a dominant issue in discussing regulation. IRC seems costly in comparison with other alternatives, primarily because of the duplicate regulatory processes. The

[92] The distinction between the possible manifestation of dissatisfaction and responses to deterioration traces back to the seminal work of Albert O Hirschman, *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States* (Harvard University Press 1970).
[93] Abramowicz, Ayres and Listokin (n 24) 946.
[94] ibid. See also the discussion in Section 6.1 below.
[95] Black (n 2) 13–14.
[96] Gubler (n 23) 148.
[97] ibid 149; Kingdon (n 7) 31 ('Through feedback from the operation of programs, however, implementation can lead to innovation').

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

organisational duplication is perceived intuitively to be the most wasteful element of IRC.[98] Duplicity and regulatory overlap are often the reasons behind efforts to merge existing regulatory agencies, although merging crippled or obsolete regulators does not guarantee that the new merged regulator will necessarily be more efficient.[99] In fact, efficiency arguments often ignore the fact that regulatory duplicity can increase the desired effects of regulation.[100] The strongest counter-argument against the cost criticism, however, is the short-term versus long-term perspective. While IRC may be a costly measure in the short term, this cost would be outweighed in the long term by the increase in the efficiency and efficacy of the developed regulation.

Other cost-related arguments focus on the competitors and their behaviour during the IRC process, for example, by trying to window-dress their results, thereby leading to bias in the final outcome. IRC may also turn out to be costly and inefficient if competing regulators engage in predatory behaviour in an attempt to undermine the policy outcomes of their opponents. Such behaviour is typical in market competition and is therefore likely to emerge in IRC processes. Contestants may also have an incentive to collude, for example, by trying to prolong the process if they receive rents throughout the duration of the process. They may also independently develop similar regimes, in which case the justification for a costly competitive implementation process disappears. However, the underlying conclusion in the latter case may be that the identical or similar proposed regulatory solution is consensually the best remedy for the issue at hand, and that all IRC competitors should share the reward for its development.

Turf wars may also emerge. If the IRC process has already started, part of the process may require deciding within the ambit of which IRC competitor a new market entrant will fall. If the additional entrant increases the chance of regulatory success, the competitors are likely to engage in a turf war over the inclusion of the actor within their jurisdiction. If the additional entrant is seen as a cost, the actors will engage in a wasteful fight to push the participant towards the opponent's jurisdiction. A possible solution would be to arrive at these decisions by lottery.

The costs inflicted by competitors acting strategically can be mitigated in two ways: (i) by choosing observable evaluation standards, so that monitoring the IRC process throughout its duration becomes relatively easy, and (ii) by appointing a meta-regulator or referee to supervise the IRC process, with the authority to intervene in the event of foul play.

Finally, there are costs imposed on regulated subjects. A drawback of IRC is that potential market entrants may be deterred by the existence of an IRC process. This is an expected consequence of regulation and is especially aggravated when there is uncertainty as to the type and nature of the potential regulation. Hence, IRC would be most justified in markets that lack effective regulation but already have a sufficient number of actors, and where the risk of exit by one or

[98] Birkinshaw (n 10) 21.

[99] Jerry W Markham, 'Merging the SEC and CFTC-A Clash of Cultures' (2009) 78 *University of Cincinnati Law Review* 537, 587 ('Combining failure with failure does not seem like a formula for success').

[100] For an argument in favour of duplicity and even multiplicity in institutional design see Mariana Mota Prado and Lindsey Carson, 'Brazilian Anti-Corruption Legislation and its Enforcement: Potential Lessons for Institutional Design', IRIBA Working Paper 09, July 2014 (arguing that the multiplicity of institutional entities dealing with corruption in Brazil has strengthened the collective impact on the regulated field).

more of these actors as a result of new regulation is low. Having noted that, the risk of deterring potential entrants should not be exaggerated. First of all, market entrants always expect some form of regulation. Second, the risk of deterrence could be allayed by structuring the aims of the IRC to include reducing barriers to entry as one of the evaluated components of the competing regulations.

In the short term, IRC may result in harm to some of the subjects of the regulation. This does not necessarily imply that the harmed subjects are those that were subjected to the less successful regime. It might very well be that the regime that turns out to be superior from a social welfare perspective at the end of the IRC process is the regime that imposed more costs on the regulated subjects during the process; this means conversely that the subjects under the inferior regime were better off during the IRC period. It would be sensible to include some form of compensatory mechanism within the framework of the IRC to equalise losses and gains by subjects of competing regulatory regimes after the IRC process is over. Equalisation payments should also take into account the fact that the subjects of the inferior (and therefore unadopted) regime will have to invest additional costs in order to shift compliance to the superior, adopted, regime.[101]

The structure of the compensation mechanism and its financial sources can take many forms depending on the regulated market, the expected length of the IRC, the expected harm to regulated subjects and the risk of attrition. So where the risk of attrition is high the mechanism could be announced in advance. Where no risk of attrition exists, perhaps a compensation mechanism is superfluous. Funds for compensation payments could be accumulated by imposing taxes or fees on the regulated subjects. The distribution of payments should take place at the end of the IRC process. This type of funding is suitable when the benefits of better regulation accrue particularly to market participants, such as in the case of regulation of financial intermediaries. In other cases, compensation would have to come out of the public budget. No compensation mechanism would be able to perfectly restore the equilibrium between the regulated subjects to the market's

[101] For the common argument that transition relief waters down the objection to reform see Richard L Revesz and Allison L Westfahl-Kong, 'Regulatory Change and Optimal Transition Relief' (2011) 105 *Northwestern University Law Review* 1581, 1623. The authors also offer a critique of this position: ibid 1626–29. However, the compensation payments I propose go beyond mere transition relief. They are fairness driven. In fact, equalisation may be in kind and not monetary. For example, if the result of IRC is that the subjects of one regulatory competitor end up in a dominant market position compared with the subjects of the other competitor, it might be insufficient to provide monetary relief. A possible solution would be to redivide the market between the subjects after the prevailing regulation is put into place. Such a solution may eventually cause the subjects to agree on the accurate equalisation payments. The reason for this can be explained by the following example. Assume two regulators compete on regulation, with each competitor regulating one subject in the market. The two subjects are companies that cater for all the clients in the market and at the beginning of the process they split the clients in the market evenly. In the IRC process, the first regulator wins. The subject regulated by the first regulator garnered 80% of the market during the IRC process while the other company lost 30% of its market share. Assuming that the change in market domination is the result of different regulatory regimes, it might be easier for a regulator to reallocate the clients evenly than to calculate the compensation for the changed market structure. In fact, this method of equalising the market is likely to induce the dominant company to negotiate with the other company for contractual payments in return for remaining with its dominant position. This would yield mutually agreeable compensation. If reallocating clients is not an option (because the clients may object) another form of equalisation could be ordering the dominant company to transfer the relevant share of revenues to the competitor for a predetermined period of time.

pre-IRC starting point. Some regulated subjects would probably lose their share of market dominance following the conclusion of the IRC process without any possibility of recovering this position regardless of any compensation.[102] However, a compensation/equalisation mechanism is important because it ameliorates many of the costs associated with potential strategic behaviour by the regulated subjects.

Finally, there is some probability that splitting the regulated subject population between competing regulators may stifle market innovation in the underlying field.[103] In other words, there is a trade-off between innovation in regulation and innovation in the underlying regulated field. This loss of market innovation may occur if a regulated entity comes up with a welfare-increasing market innovation that is not permissible under its pertinent regime but would have been acceptable under the competing regime.[104] In such a case the innovation may not be taken up during the IRC period. Assuming that the IRC process will produce better welfare-enhancing regulation, the trade-off is likely to justify the means because the social and private loss from the stifling of some market innovation is limited. The reason is simple: if the particular market innovation is permissible under another competing regime and that other regime prevails at the end of the IRC process, the innovation is likely to be taken up after the IRC concludes, thereby mitigating some of the social loss. However, if the prevailing regime ends up to be that under which the stifled innovation is not permissible, then stifling the development of that innovation imposes no social or private welfare loss.[105]

Is IRC ill suited for markets that require a boost in terms of competitiveness? Not necessarily. Theoretically, the goal of increasing the level of competition in a particular market either by attracting competitors or by reducing the anti-competitive behaviour of existing market actors can be integrated into the objective function of the IRC process. In practice, markets with low competition levels are usually already heavily regulated and the possibility of introducing costly uncertain regulatory measures will probably invoke strong opposition from the market's population.

[102] Indeed, compensation payments should take into account not only direct foregone profits but also loss of market share.

[103] See, for example, the argument that the jurisdictional division between the SEC and the Commodity Futures Trading Commission (CFTC) has stifled the development of financial instruments such as Index Participation Certificates: Benson (n 41) 1207.

[104] For example, imagine that a new type of futures contract is developed in a securities market.

[105] Note that this welfare loss can be prevented entirely if the regulated entity that may not use its market innovations sells that innovation to a competing regulated entity which is the subject of another regulatory regime under which the innovation is permissible. However, such a sale should be forbidden during the IRC process because the sale captures some of the future profits from the innovation; the selling entity would thereby be migrating de facto from its regulatory regime to the competing regime and breaking the no-exit rule.

At the bottom line, the importance of cost–benefit analysis should not be overstated.[106] It rarely captures the costs of voids or regulatory inaction.[107] Regulating without stifling productivity or creativity in the market is not an impossible mission.[108]

### 5.2. EVALUATION

There are two evaluation phases in IRC. During the first phase, the agency conducting the IRC process needs to evaluate the newness of the regulatory regime that each of the contestants proposes to test. Determining whether an innovation is new and novel may be difficult in some cases but this challenge should be less problematic when the process of IRC is applied in a field in which existing regulatory technologies have failed. Even if the regulatory regime proposed by the IRC contestant is an emulation of a tool already in use in another field, it might be innovative to apply it to the new field, given that this has never been done before.[109]

The second and more challenging evaluation takes place at the end of the process, after the implementation phase of the competing regimes. The evaluation of the effects of the different IRC regimes, for the purpose of determining which is the prevailing regulatory regime, depends on the complexity of the regulated subject, the visibility of the effect and the level of expertise required for the assessment. Evaluation by a group of well-informed objective experts is a good solution, but an evaluation by the community at large should also be considered, where possible, because it reinforces the community's support for the chosen regulation and increases its faith in the process.[110]

One possible critique of IRC is that it resembles current empirical policy evaluations in that it tests policies without comparing them with a population with neutral treatment.[111] This criticism holds water only if IRC is perceived as a tool for merely evaluating policies rather than as a method of developing innovative regulation. Indeed, IRC is not a mechanism for evaluating a particular policy; it is rather a mechanism for creating better regulation.

---

[106] Nathan Cortez, 'Regulating Disruptive Innovation' (2014) 29 *Berkeley Technology Law Review* 175 (arguing that agencies need not be overly cautious and tentative with innovations and should favour experimentation when there is concern for premature or erroneous regulation).

[107] Michael A Livermore, 'Cause or Cure? Cost–Benefit Analysis and Regulatory Gridlock' (2008) 17 *New York University Environmental Law Journal* 107 ('When agencies fail to address a pressing environmental problem, this inaction – though it can be just as costly, in economic terms, as inefficient regulation – is not subjected to cost–benefit scrutiny'); Cass R Sunstein, 'Paradoxes of the Regulatory State' (1990) 57 *University of Chicago Law Review* 407 (inefficient or captured regulators damage social welfare as much as costly regulation does).

[108] Richard B Stewart, 'Regulation, Innovation, and Administrative Law: A Conceptual Framework' (1981) 69 *California Law Review* 1256, 1261 (concluding that 'productivity problems do not justify abandoning environmental, health, and safety goals', but supporting modification or replacement of regulatory tools 'in order to reduce adverse impacts on market innovation and to provide incentives for social innovation'). Furthermore, the assumption that regulation stifles innovation is simply untrue: see generally Jacques Pelkmans and Andrea Renda, 'Does EU Regulation Hinder or Stimulate Innovation?', *IRMO Occasional Papers,* 1/2015 (arguing that 'regulation can at times be a powerful stimulus to innovation', particularly when it is less prescriptive, more flexible and is characterised by lower compliance and red-tape burdens).

[109] Black (n 2) 4–5.

[110] Baldwin, Cave and Lodge (n 25) 97–98.

[111] Abramowicz, Ayres and Listokin (n 24) 931.

### 5.3. EQUALITY

The issue of equality is a challenging legal obstacle for adopting IRC as a regulatory development tool,[112] because IRC deliberately applies different regulation to identical subjects. However, IRC is founded on *ex ante* equal treatment. Although IRC means that identical or similar subjects will be regulated by different regimes, the *ex ante* pairing of subjects with regulatory regimes is random,[113] the efficacy of the imposed regimes is unknown, but the aspired outcome is identical. In spite of the fact that randomness entails arbitrariness, legal systems do employ *ex ante* randomness quite often,[114] although it is generally more acceptable in administrative procedures.[115] Essentially, IRC is a case of regulating under a veil of ignorance with *ex ante* equal and benevolent intentions.

Judicial review of each of the IRC regimes being developed according to the 'arbitrary and capricious' standard should not be prevented.[116] However, a court should not strike out one regime simply because another regime has been proposed and implemented by another IRC contestant. Courts should give some latitude to IRC because it concerns fields in which no effective regulation exists, and the lack of regulation is acknowledged by lawmakers and regulators as a void that requires filling, in the public interest.

Judicial review of IRC should focus on ensuring that:

- the initial terms of the IRC are balanced and fair;
- resources are fairly allocated to the IRC competitors;
- no conflict of interest or 'capture' exist in the role of the IRC meta-regulator or referee; and
- the learning process of the IRC is implemented in the final stage of applying the superior regime.[117]

It should also guarantee appropriate compensation mechanisms to the extent that costs and harm may be unevenly spread among subjects of IRC.

The superior regime will, of course, be subject to more scrutinising judicial review,[118] but should be given some deference by courts in view of the fact that it has been tried and succeeded 'in the field'.

Assuming that equality concerns are addressed properly by the designers of the IRC process, sophisticated referees/meta-regulators of the process can rank proposed regulatory regimes

[112] ibid 972 (admitting that courts tend to treat randomised experimental law with antipathy).
[113] Aronson (n 36) 91 (randomisation guarantees initial distributive equality because regimes are imposed regardless of the power, size or strength of the subjects); Abramowicz, Ayres and Listokin (n 24) 968–69 (arguing that both legal precedent and philosophical analysis do not prevent randomised experimentation with laws).
[114] Aronson (n 36) 83–88 (exemplifying the use of randomness in the allocation of indivisible resources, and in the process of case allocation and panel assignment in courts).
[115] ibid 88 ('Randomness in the judicial decision is shunned, whereas randomness in judicial administration is allowed. The judge may not flip a coin, but the court registrar may certainly do so').
[116] ibid 97–99. For a discussion of the 'arbitrary and capricious' judicial review standard in the case of regulation and the proposition that experimental law can pass such a standard, see Gubler (n 23) 133–34.
[117] ibid 143 (suggesting that judicial review can act as a check to ensure learning is incorporated into the final regulation).
[118] Gubler (n 23) 144.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

according to their estimated risk or probability of success. If the assessment of risk is sufficiently grounded, it can justify a departure from the 'equal size of subject population' principle. Meta-regulators can then set the size of the subject population allocated to each IRC contestant at an inverse relation to the risk associated with the regulatory regime applied to that group. Such an allocation limits the dangers involved in extremely innovative regulatory ideas without sacrificing the opportunity of letting the creativity of regulators run wild. It follows that in such sophisticated IRC processes, compensation to subjects should also be adjusted in relation to the harm to which they were exposed.

### 5.4. Entrenchment and Opposition

Path dependence is an obstacle to developing and implementing innovative regulation.[119] Even if there is no existing regulation, or there is a consensus that the existing regulation is obsolete, innovation is likely to encounter some opposition;[120] interest groups, for example, may attempt to block innovation because they enjoy the benefits of the current regime or lack thereof.

The conditions for IRC should ameliorate some of the concerns. When existing regulation is obsolete or when the regulated field is *terra incognita*, path dependence opposition is weaker because the path is no longer worth depending on, at least from the regulator's perspective.

One might argue that incumbents in the market may oppose new regulation through IRC processes because they impose additional costs. It should first be noted that these costs would probably be incurred anyway because regulatory voids are not likely to persist forever. Therefore, the level of objection from subjects in unregulated fields should be no different from the normal opposition to any other regulation. Secondly, incumbents that are currently subjected to obsolete regulation are actually more likely to support IRC than object to it. This is because their competitors are likely to be new entrants enjoying the benefits of regulatory arbitrage or circumventing old regulation with new technology.[121] Incumbents would therefore prefer either complete deregulation or measures that will equalise the regulatory burden in the market.

Path dependence may occur within the IRC process itself. There is a danger of entrenchment by the subjects and the competing regulators as a result of network effects. That may cause a preference towards a less than optimal regime bcause of path dependence created by the IRC process, if parties that made asset-specific investments on the basis of an inferior regulatory regime stand to lose these investments and resist the adoption of the superior regime. This difficulty is not insurmountable. Unlike the danger of entrenchment or resistance in market-wide experimental laws,[122] in the case of IRC the network effects encompass at most only half of the market and they are therefore less powerful in comparison with market-wide path dependence. This concern

[119] ibid 139.
[120] Black (n 11) 21 ('Innovations are likely to be opposed').
[121] Mark Thatcher, 'Sale of the Century: 3G Mobile Phone Licensing in Europe' in Black, Lodge and Thatcher (n 2) 92, 92–93 (noting that regulatory innovation can help to reshape interest group dominance).
[122] Gubler (n 23) 139–40 (warning that network effect entrenchment and resistance by interested parties impede the success of experimental law).

can be further mitigated by integrating compensatory mechanisms, which will guarantee that subjects will engage in desirable asset-specific investments during the IRC process in spite of the uncertain horizon of the particular regime to which they are subjected.

### 5.5. ATTRITION AND SPILLOVER EFFECTS

The attrition of regulated subjects is a concern in experimental law and might be an alarming problem in IRC,[123] particularly when the IRC process is applied to markets with a small number of subjects. A possible solution is to define the prevention of attrition as one of the guidelines or objectives of the process, such that if significant attrition occurs, the regulatory regime will be deemed to have lost the competition. Obviously, if the risk of attrition is particularly high, IRC may not be a suitable mechanism for innovation in that field.

Proponents of experimental law are concerned with spillover effects from the treated group of subjects to the control group.[124] IRC can prevent arbitrage-related migration of subjects from one regime to another, but it would be hard to prevent spillover effects; nor would it be justified. Assume, for example, that one regulator of media content imposes a regime which causes subjects to develop content that generates significant revenue and, as a result, the subjects of the competing regulator voluntarily generate similar content, thereby making it difficult to distinguish between the two IRC players. A meta-regulator or referee could be granted the power to prevent subjects from voluntarily conforming to regulation developed by a competing regulator on top of the regulation imposed by 'their' regulator, but an equally possible conclusion would be that the outcome is an indicator of the superiority of the first regime and therefore the IRC process should be stopped and evaluated.

## 6. APPLICATION: MEDIA REGULATION

This section argues that the regulation of audiovisual content, particularly for the purpose of protecting and enhancing cultural pluralism[125] in audiovisual content in small media markets, is ripe for IRC. It should be clarified that I do not make a normative claim justifying the need for content pluralism policy. Instead, I wish to take the existence of such policies as given, and observe that countries that adopt such policies view them with a great deal of importance.[126]

---

[123] Abramowicz, Ayres and Listokin (n 24) 957–59.

[124] ibid 960.

[125] Note that the term 'media pluralism' is quite obscure: Peggy Valcke, 'Looking for the User in Media Pluralism Regulation: Unraveling the Traditional Diversity Chain and Recent Trends of User Empowerment in European Media Regulation' (2011) 1 *Journal of Information Policy* 287, 288 (no clear definition of media pluralism.)

[126] Diversity and pluralism replaced scarcity as the modern rationale for media regulation: Peter Hettich, 'YouTube to be Regulated? The FCC Sits Tight, While European Broadcast Regulators Make the Grab for the Internet' (2008) 82 *St John's Law Review* 1447, 1451 ('In particular, diversity and localism form the guiding principles for the FCC's policy making in broadcasting'). The notion that audiovisual broadcasts have a significant impact on the formation of national cultural identity, social cohesion and pluralism can be found in almost all national or supranational legislation regarding the role of the media, and applies to public and private audiovisual media. For example, the Canadian Broadcasting Act 1958 was enacted as a result of the fear of 'Americanization' of the

Network industries, such as media, tend to be highly regulated.[127] Media markets suffer from inherent market failures that justify regulatory intervention. A compelling need for intervention arises in the context of content aimed at enhancing cultural diversity and democratic civil discourse.[128] First of all, media content producers and providers do not fully internalise the benefits of the content they produce and disseminate because information is a public good and it is difficult and often impossible to exclude non-paying content consumers. Secondly, while society at large enjoys the benefits of cultural pluralism, this benefit does not require all the members of a given society to pay for and consume the locally generated media content, which means again that the social gain from such content is not captured by the content producers and providers. From the perspective of regulators, the challenge is even more complicated because foreign

Canadian domestic culture: Colin J Coffey, 'Foreign Investment in Cable Television: The United States and Canada' (1983) 6 *Hastings International and Comparative Law Review* 399, 417. In the European Union (EU), the Treaty on the Functioning of the European Union ((entered into force 13 December 2007) [2008] OJ C 115/47), art 167, makes cultural diversity an intrinsic value of the Union by stating that '[t]he Union shall contribute to the flowering of the cultures of the Member States, while respecting their national and regional diversity and at the same time bringing the common cultural heritage to the fore'. Directive 2010/13/EU of 10 March 2010 on the Coordination of Certain Provisions laid down by Law, Regulation or Administrative Action in Member States concerning the Provision of Audiovisual Media Services (Audio Visual Media Services Directive) [2010] OJ L 95/1, Ch VI, sets production and distribution quotas regarding European media content in order to guarantee the production and broadcast of local content with particular regard to local cultural aspects. Similar mandates can be found in the laws that govern the role of media regulators in numerous countries. In Israel, for example, the Israeli Broadcasting Association Law 1965, art 3, requires the public broadcaster to reflect 'all the components of Israeli society': Baum (n 77) 82. Private national broadcasters in Israel are also mandated by law to promote 'cultural pluralism': ibid 106. In Croatia, the Electronic Media Act 2009, art 9, which regulates private broadcasters, states that providing audiovisual and radio programmes shall be in the interest of the Republic of Croatia 'when programmes relate to … exercising the rights to public information and to keeping all citizens of the Republic of Croatia and members of Croatian national minorities and communities abroad informed and to exercising the rights of national minorities within the Republic of Croatia … the preservation of the Croatian national and cultural identity'. The Greek Constitution, art 15(2), mandates the regulators of broadcasting services in the country to promote its cultural development through regulation of the quality of programming. In Spain, regional councils are entrusted with the role of promoting cultural diversity by local broadcasters: Laura Bergez Saura and Nuria Ruguero Jimenez, 'Spain' in Helena Sousa and others (eds), *Media Regulators in Europe: A Cross-Country Comparative Analysis* (University of Minho, Portugal 2013) 146, 154.

[127] Baldwin, Cave and Lodge (n 25) 7.

[128] Hettich (n 126) 1461 (observing that any shortfall in the production of domestic cultural content is compensated by foreign content as a result of global market forces); Ellen P Goodman, 'Media Policy Out of the Box: Content Abundance, Attention Scarcity, and the Failures of Digital Markets' (2004) 19 *Berkeley Technology Law Journal* 1389, 1455 (arguing that even if media catered for what consumers want, it would not necessarily supply the content needed for a diversified civil democratic society); C Edwin Baker, *Media Concentration and Democracy: Why Ownership Matters* (Cambridge University Press 2007) 31 ('… the market normally will not adequately produce and distribute the educational, political and cultural media products responsive to real preferences or needs of some portions of the population, especially of the poor but sometimes also of other demographic minorities or groups not valued by advertisers'). Arguably, a combination of low technological barriers to entry, free cross-border flow of information and a plethora of media sources can help to dismantle the media domination of existing political power structures that are being currently reinforced by the national cultural media policy. This was the promise of the internet. The discussion regarding the validity and viability of this argument is beyond the scope of this article. However, for a sceptical view of the internet's promise, cf Andrea Calderaro and Alina Dobreva, 'Framing and Measuring Media Pluralism and Media Freedom across Social and Political Contexts' in *European Union Competencies in Respect of Media Pluralism and Media Freedom* (Robert Schuman Centre for Advanced Studies and Centre for Media Pluralism and Media Freedom 2013) 16 (doubting the expectations that new media will be the panacea for lack of pluralism in current media platforms).

content producers that do not adhere to local regulation capture revenues by appealing to populations outside their countries of origin, and by offering attractive foreign content while externalising the costs of maintaining national cultural pluralism to the local regulator and its subjects. As will be elaborated below, the underpinnings of cultural pluralism regulation in media make this regulatory field particularly suited for IRC, especially in small jurisdictions aspiring to protect a unique cultural identity by entrenching a specific cultural balance in the audiovisual sphere.

## 6.1. REGULATING FOR CULTURAL PLURALISM IN (SMALL) MEDIA MARKETS

### 6.1.1. DYNAMIC UNCERTAINTY IN MEDIA REGULATION

The audiovisual media content market is undergoing tremendous change as a result of a combination of factors, which include technological convergence of media platforms, plummeting costs of content distribution, dominant global private players and the relative ease with which content can cross borders. These developments are game changers for regulators.[129] For example, content that was previously subject to national regulation through the platform on which it was provided can now be supplied through new platforms, thereby circumventing earlier regulatory requirements. In addition, the transnational nature of the internet poses challenges to national regulators seeking to implement regulation that is motivated by local and national interests and faced with content emanating from other jurisdictions with different, and sometimes conflicting, notions and motivations.[130] The inherent conflicts explain why global movements towards standardisation in media are scarce and, to the extent that they do exist, tend to be very loose compared with international public or private regulatory initiatives, understandings and institutions in other fields.[131]

[129] Price (n 14) 33; Katrin Nyman-Metcalf, 'Legislative Drafting Challenges in Communications Regulation: Convergence, Globalization and New Media Culture' (2013) 2 *International Journal of Legislative Drafting and Law Reform* 313, 314 (observing that media regulation requires very rapid changes and adaptation to technology).

[130] There is growing evidence that national courts, regulators and lawmakers, even in democratic countries, find ways to influence the local manifestation of content disseminated by foreign content suppliers on the internet: Jack Goldsmith and Tim Wu, *Who Controls the Internet? Illusions of a Borderless World* (2nd edn, Oxford University Press 2008) 149–50 (arguing that enforcement of national laws is one of the reasons for the transformation of the global internet network into a 'collection of nation-state networks'). However, the effects of domestic law on foreign content suppliers is much less predictable than the effect that domestic law had on domestic providers of content before the existence of the web. For an argument that globalisation has narrowed the effective powers of national agencies see, for example, Daphne Barak-Erez and Oren Perez, 'Whose Administrative Law Is It Anyway? How Global Norms Reshape the Administrative State' (2013) 46 *Cornell International Law Journal* 455, 460 ('as a result of globalization processes, the state has lost its exclusive power to regulate matters that lie within the traditional realm of administrative law').

[131] For example, the recognition of freedom of speech in the European Convention for the Protection of Human Rights and Fundamental Freedoms (entered into force 3 September 1953) 213 UNTS 222 (ECHR), art 10, and the relatively open standards set by the Audio Visual Media Services Directive (n 126). See also Colin Scott, 'Between the Old and the New: Innovation in the Regulation of Internet Gambling' in Black, Lodge and Thatcher (n 2) 114, 115 (observing that 'the interjurisdictional dimension to the internet is a key part of the policy problem … the global world of interaction between governments, regulatory and policy entrepreneurs at the international level has only a limited role which is rarely decisive in shaping policy change'). Cf Price (n 14) 3 (arguing

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

There seems to be a consensus among experts that in the age of the internet, with the easy cross-border flow of information, national content regulation as we know it does not work.[132] It fails particularly in the face of transnational flows of information[133] and, given the speed of technological development, the entire regulatory field is in a constant state of uncertainty.[134]

However, the withering of domestic media regulation as we know it does not mean that regulators have the prerogative to surrender. After all, the promotion of a particular mixture of audiovisual content and the socio-political national fabric that media policy aims to preserve does not lose its importance in the national sphere just because technology enables more local and transnational content providers to approach the citizenry. Availability of choice in and of itself does not necessarily improve citizenry, or democracy for that matter.[135] In fact, globalisation only increases the importance of defending national media content policy.[136]

Of course, IRC means introducing an uncertain regulatory horizon in the short term. This is likely to generate the usual opposition arguments, such as compliance costs stifle investment in market innovation.[137] On the other hand, the dynamic nature of the media and telecommunications industry means that regulation should be put into place as early as possible in order to make a difference.[138] Following the logic of diversification in regulation,[139] it would make

that the regulation of the market for speech is shifting from inward-looking state control to outward-looking multilateral approaches based on negotiation and agreement).

[132] Feick and Werle (n 2) 524 (arguing that the question is not 'whether Cyberspace can be regulated' but pointing out that 'it also makes regulation (especially national regulation) by public authorities increasingly difficult or even ineffective, and futile'); cf Price (n 14) 28 ('those who ring the death knell of the state may ring too soon').

[133] Feick and Werle (n 2) 541 ('border-crossing internet activities are difficult and sometimes impossible to regulate').

[134] ibid 542 (content regulation on the internet as an example of a 'rapidly changing technological environment', which means a 'continuous flux' of changing regulatory approaches with 'no model being superior to any other'); Gibbons (n 84) 239–40 ('In the light of the emerging dominance of (largely US based) global communications companies, the question remains whether it will be possible for states to pursue media policies that will enable and protect the emergence of a diversity of national, regional and local identities').

[135] For a critical view of the ideology of choice see generally Renata Salecl, *The Tyranny of Choice* (Profile Books 2010) (claiming that it is misleading to argue that individual choice can contribute to social change); Gibbons (n 84) 240 (multiplicity of channels may indicate 'superficial pluralism').

[136] Price (n 14) 26 (media has a prominent role in national consensus building and '[g]lobalization means that the cultural bonds and loyalties that seemed once to be within the control of the state are now less so'). The regulation of communications is a critical element in the formation of the 'market for loyalties' within which national identity and a sense of community are formed: ibid 31; Nyman-Metcalf (n 129) 313 ('Media has a recognized role in building national identity').

[137] See generally Yann d'Halluin, Peter A Forsyth and Kenneth R Vetzal, 'Managing Capacity for Telecommunications Networks under Uncertainty' (2002) 10 *IEEE-ACM Transactions on Networking*, 579 (uncertainty will delay investment in telecommunications infrastructure).

[138] Bruno Deffains and Marie Obidzinski, 'Real Options Theory for Law Makers' (2009) 75 *Recherches Economiques de Louvain* [*Louvain Economic Review*] 93 (arguing that laws and regulations tend to obsolesce quickly in the telecommunications industry, and therefore they should be enacted sooner rather than later in order to make more of a difference).

[139] Alces (n 52) and accompanying text.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

sense for a regulator embarking on a mission to build or fortify the national socio-cultural capital to diversify the regulation not only in terms of guaranteeing a variety of media outlets and programme genres but also across a variety of innovative regulatory oversight and incentive regimes. This is particularly true when safeguarding the growth of cultural capital is a long-term goal and risks are high.

### 6.1.2. THE SENSITIVE AND SOPHISTICATED BALANCE OF MEDIA REGULATION

Creativity is also required because the regulation of mass media content has always been a sensitive issue because of the implications of freedom of expression. Media regulation involves an ongoing tension between liberal and interventionist regimes. Liberal regimes tend to protect freedom of expression but are perceived to offer weak protection to cultural pluralism, whereas protectionist policies enhance cultural aspects at the expense of freedom of expression.[140] The borderless nature of the internet complicates the issue even for less interventionist jurisdictions because even liberal democratic countries have different approaches to certain types of content. For example, countries tend to have varying levels of tolerance to indecent, obscene or offensive content.[141] What can be done when content from a more permissive jurisdiction flows across the border to a jurisdiction with more stringent regulation?

The regulatory challenge is further complicated by the fact that it requires a sophisticated understanding of the layers and actors that may or may not be subject to regulation, and the interaction between them. Regulation of media content needs to recognise the existence of at least two layers: the content layer and the technical layer.[142] While the mission of a regulator may be focused on the content layer, the fact that content is transmitted over a platform with particular technical traits may have profound implications for the effectiveness of the regulation.[143] The need to address the regulation of content through the technological layer can be seen in the attempts to regulate content by national authorities employing filtering and enlisting internet service providers to regulate streams of information.[144] This means that media regulators need to consider innovative ideas for targeting content producers, content broadcasters, media platforms or service providers, depending on the specific characteristics of the particular market.

[140] Gibbons (n 84) 245.
[141] See n 150.
[142] Feick and Werle (n 2) 526; Baker (n 15) 384 (different parts of the media may require different types of regulation). A compelling historical example of states defending themselves against influential foreign content by employing a technological separation 'wall' is the Eastern European Bloc's choice of SECAM technology for colour television as opposed to the PAL technology more common in the West: Price (n 14) 85.
[143] Peter Alexiadis and Martin Cave, 'Regulation and Competition Law in Telecommunications and Other Network Industries' in Baldwin, Cave and Lodge (eds) (n 2) 500, 503 (technological convergence and economies of scope play a significant role in the telecommunications and media industries).
[144] Feick and Werle (n 2) 540–41.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

IRC is advantageous in this setting because it can address technological complexities and, at the same time through practical implementation, garner legitimacy for the sensitive balancing of the regulatory solution that will eventually prevail.

#### 6.1.3. LIMITED POSSIBILITIES FOR IMITATION

Regulation of media pluralism is aimed at creating a 'product that is particular to a jurisdiction'.[145] Not surprisingly, there is no single agreed regulatory method for media pluralism.[146] However, imitating what other countries do, or even relying on the prospect that other countries with similar cultural pluralism challenges will develop an innovative regulatory solution that will be easily adopted by others, are not optimal solutions to this challenge. Moreover, the tendency of small jurisdictions to rely on other countries to do the work in terms of developing new regulatory solutions to common problems is not likely to succeed in this field.[147]

The reasons for the weakness of imitation are similar to the explanations behind the relative scarcity of experimental law. One of the explanations for the lack of experimental law is the free rider problem: each state prefers not to invest in costly innovation in the hope that another state will develop a solution that will then be adopted at no cost.[148] The result is suboptimal investment in innovation.

Another reason is that regulatory transplants are not necessarily workable in a new market.[149] Adopting a rule from another state creates false hope, given the significant differences between media markets and the forces that operate on and within them. Adopting transplanted regulation not only means adopting regulation that fits other countries more than the adopted country; it is also likely that the regulation will be one that was developed by and for a larger country and therefore will fit major cultural content producers and not small producers in small markets. Indeed, regulation for pluralism and diversification in media content means regulating to promote

[145] Gibbons (n 84) 244; Antonio Ciaglia, 'Pluralism of the System, Pluralism in the System: Assessing the Nature of Media Diversity in Two European Countries' (2013) 75(4) *International Communications Gazette* 410 ('although nearly all of the main European TV networks rely on a public-private structure, significant differences arise in how this structure takes shape and in the policy outcomes according to the context').

[146] Peggy Valcke, 'A European Risk Barometer for Media Pluralism: Why Assess Damage When You Can Map Risk?' (2011) 1 *Journal of Information Policy* 185, 185–86 ('While there is broad consensus in Europe about the importance of media pluralism for democracy and identity formation, there are still widely diverging views on how to regulate the matter').

[147] Black (n 11) 27 ('The usual hypothesis is that states emulate each other's policies').

[148] Gubler (n 23) 149–53.

[149] Price (n 14) 66–67 (arguing that some parts of media law are 'specifically local and tied, deeply, to their context' while other elements can be transplanted); Ido Baum, 'Legal Transplants v. Transnational Law: Lessons from the Israeli Adoption of Public Factors in Forum Non Conveniens' (2015) 40 *Brooklyn Journal of International Law* 358.

a particular mixture of values, beliefs, norms, conduct, and so on.[150] In this case, one size absolutely does not fit all.[151]

The difficulty of adopting regulations from another jurisdiction, or even drawing conclusions on the right course of action, is exemplified by Gibbons' comparative study of Canada's protectionist regime, the United Kingdom's (UK) deregulated media market and the European Union's (EU) interventionist policy. All three jurisdictions aim to promote some sort of media pluralism. Gibbons observes that Canada seems to have successfully defended its media policy against the US cultural influence; that the UK regulatory performance indicates a race to the top in terms of content quality, although it is impossible to determine whether this outcome promotes cultural pluralism; and that the EU policy seems to generate a race to the bottom in terms of quality.[152] It seems that in a comparison of different jurisdictions it is extremely difficult to determine what works, or why.

This combination of differences and uncertainties justifies the implemention of a unique innovative regulation process, such as IRC, for every small media market looking to protect a unique balance of cultural representations.

#### 6.1.4. THE CHALLENGE FOR SMALL STATES

In the case of media regulation for cultural pluralism in small media markets, building resilience to exogenous pressures, both global and technological, is probably the most pressing need. A lack of domestic cultural pluralism and diversity is seen as a national threat to social cohesion

[150] Feick and Werle (n 2) 533; Alexiadis and Cave (n 143) 500 ('The regulation of network industries thus involves the pursuit of both economic and social objectives'). See also Goldsmith and Wu (n 130) 150–51. An often discussed example of cultural discrepancies which translate into national regulation challenges is harmful content, eg, obscene content or hate speech. The European Audio Visual Media Services Directive (n 126) art 27 imposes a prohibition on harmful content in linear broadcasting but no such prohibition exists with regard to non-linear ('on demand') services. It is also almost impossible to apply the EU standard of harmful content to all foreign broadcasters that have varying standards, particularly if they broadcast over the internet. Similar challenges arise in the regulation of hate speech, in spite of the fact that hate speech prohibitions have been agreed in the global arena in international conventions: see International Convention on the Elimination of All Forms of Racial Discrimination (entered into force 4 January 1969) 660 UNTS 195, art 20(b), and International Covenant on Civil and Political Rights (entered into force 23 March 1976) 999 UNTS 171, art 4(a). See generally Michel Rosenfeld, 'Hate Speech in Constitutional Jurisprudence: A Constitutional Analysis' (2002) 24 *Cardozo Law Review* 1523. For an interesting example of cultural differences having a potential impact on public opinion, contrast the US media's aversion to showing graphic images of war with the tendency to show such images in channels emanating from Arab countries: Conor Friedersdorf, 'What's with the US Media's Aversion to Graphic Images?' *The Atlantic*, 19 June 2013, http://www.theatlantic.com/magazine/archive/2013/07/the-gutless-press/309405; Jeff Harrison, 'Americans Turn to Al-Jazeera for Raw Images of War, UA Study Finds', University of Arizona, College of Social and Behavioral Sciences, 18 April 2010, http://web.sbs.arizona.edu/college/news/americans-turn-al-jazeera-raw-images-war-ua-study-finds. The impact of the manifestation of cultural values of this sort and others is further aggravated by the fact that audiovisual content can now cross borders unintentionally. That is, the content is available for viewing and redistribution in foreign countries even without deliberate cross-border dissemination by its producers. This reshuffles the deck for any policy aimed at producing a particular diversification of content to promote a unique democratic balance, as purported by Professor Baker in his seminal article: Baker (n 15) 317.

[151] Feick and Werle (n 2) 525 (given the rapid commercial and social usage patterns of the internet, there is no sense in searching for 'a unitary regulatory model operating in Cyberspace').

[152] Gibbons (n 84) 249–52.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

and to democracy because foreign content providers rarely reflect domestic perspectives, let alone the complexities of multicultural perspectives in small countries with diversified communities.[153]

The problem is particularly discomforting for small countries,[154] which often require both public and private audiovisual content suppliers to produce local content and to take into account cultural pluralism and national heritage in doing so.[155] This is because content producers in small countries tend to have high production costs, small sales markets, small advertising markets, and higher dependency and vulnerability to spillovers from neighbouring countries and exogenous global trends.[156] Cultural pluralism in small media markets is highly affected by the externalisation of content from dominant or neighbouring media markets,[157] which explains why small European states have always been concerned about internal European deregulation.[158] Even though some of these states have a unique national or group language, which is a strong barrier against cultural influence by foreign content,[159] such an advantage usually translates into an obstacle to the production of local content because of the limited economies of scale. Even when local broadcasters do engage in local productions, they prefer to imitate existing globally successful ideas rather than produce innovative local programme formats.[160] Indeed, the US media market is constantly mentioned as a major transnational influence, or threat, in the context of cultural pluralism.[161] The liberal non-interventionist domestic regulation in major media content markets (and the US market in particular), combined with the almost non-existent regulation on

[153] Manuel Puppis, 'Media Regulation in Small States' (2009) 71 *International Communications Gazette* 7, 11.
[154] ibid 8 (defining small countries as countries with a population of 100,000 to 18 million citizens, excluding microstates like Monaco, the Vatican and Andorra). Note that even very large countries like Canada may exhibit problems similar to those of small countries if they are exposed to the economic influence of a significantly larger country, such as the US in the Canadian case: ibid.
[155] Manuel Puppis and others, 'The European and Global Dimension: Taking Small Media Systems Research to the Next Level' (2009) 71 *International Communications Gazette* 105, 106 ('small states not only share structural peculiarities but also feature different political and historic traditions. Hence, despite their similarities, small states react differently to their environment').
[156] Puppis (n 153) 9–11, 13–15 (arguing that small countries tend to adopt an interventionist approach to content regulation, such as quota regulation, even if this approach undermines the international competitiveness of the national media). Even in larger countries intrusive tools are legitimised in the context of cultural content regulation: Hettich (n 126) 1463.
[157] Baldwin, Cave and Lodge (n 25) 367 (noting that low environmental regulation in one state will cause an externalisation to a neighbouring state and affect its environment, even if the latter has strong environmental regulation. In the field of environmental regulation one can envisage a global agreement because all states may agree on the need to reduce pollution, but in the regulation of cultural pluralism such a solution is less likely because each state is interested in preserving a unique culture in its media content: see n 149.
[158] Gibbons (n 84) 255 (smaller states feel more vulnerable).
[159] Puppis (n 153) 12.
[160] On the preference for imitation over innovation see, for example, Stefan Bechtold, 'The Fashion of TV Show Formats' (2013) *Michigan State Law Review* 451, 456–57 (noting that most TV programme formats originate in the US and observing that even the concept of developing and trading formats is an Anglo-American invention).
[161] Jean K Chalaby, 'American Cultural Primacy in a New Media Order' (2006) 68(1) *International Communications Gazette* 33 (arguing that, even in the age of transnational and multichannel television, US broadcasters maintain and even increase their global prominence); Philip Schlesinger, 'Tensions in the Construction of European Media Policies' in Nancy Morris and Silvio Waisbord (eds), *Media and Globalization: Why the State Matters* (Rowman & Littlefield 2001) 95, 105–06 (arguing that the European audiovisual media policy has almost always been driven – officially – by the fear of Americanisation). For a more intricate view of the interdependencies of US regulation of free speech in a world of transnational information flows see Timothy Zick,

cross-border content on the internet, present an overwhelming challenge to domestic regulators. At least as far as US-produced content is concerned, the apprehensive non-interventionist policy driven by the hands-off approach dictated by the First Amendment empowers content that imparts a neoliberal capitalist ideology, both overtly and covertly.[162]

IRC is particularly relevant in this context because constant innovation, which is a major benefit of IRC, enables rapid adjustment to exogenous changes. Some scholars argue that this kind of flexibility is one of the attributes that allows small states, with their characteristically strong exposure to global changes, to maintain economic stability in the face of global turmoil.[163] The same can hold true in terms of regulatory reaction to global sea changes that influence the national landscape of media pluralism.

### 6.2. EXAMPLE: LABELLING VERSUS EDUCATING

How would IRC work in practice? This section does not pretend to provide a comprehensive illustration of an IRC process in action but rather a rough outline of how IRC would look and a sample of the challenges of its design.

The waning power of current regulation is often accompanied by calls for deregulation. Supporters of deregulation argue that in the media industry deregulation allows a thousand flowers to bloom and that a plethora of sources also means that the media consumer is exposed to diverse content.[164] This is not necessarily true.[165] Hence, the challenge for regulatory agencies is in regulating a market that is severely constrained financially, with strong foreign influence and new technologies, some of which may be located outside the territorial jurisdiction.

How would a media regulator set up an IRC process?

In the first stage, a referee will be appointed to select the competing regimes, randomly divide the market between the selected competing teams, and determine the length of the process.[166] For example, the market may include all media platforms and sources providing audiovisual content regardless of length, method of production, country of origin and language, including internet websites. The referee must also outline the criteria for determining the prevailing regime at

'Territoriality and the First Amendment: Free Speech at – and Beyond – Our Borders' (2010) 85 *Notre Dame Law Review* 1543.

[162] Price (n 14) 40 (arguing that, in the media, commercialisation may undermine historic cultures), and ibid 190 (Western programming is message-laden with ideas of free trade). The phenomenon of capitalistic ideology domination is not unique to the field of media; it manifests itself in other fields of regulation, though sometimes in less obvious ways: Barak-Erez and Perez (n 130) 483 ('The norms of this evolving system of global general administrative law are not ideologically neutral. They are driven … by a neo-liberal, capitalist vision. This ideological dimension is problematic mainly because it remains concealed behind a discourse of rationality and objectivity').

[163] Puppis (n 153) 9.

[164] JM Breeman, VE Breeman and Natali Helberger, 'On the Regulator's Plate: Exposure Diversity in a Changing Media Environment – Workshop Report and Highlights of an Expert Discussion' (2011) 1 *Journal of Information Policy* 370, 371–72.

[165] Natali Helberger, 'Diversity Label: Exploring the Potential and Limits of a Transparency Approach to Media Diversity' (2011) 1 *Journal of Information Policy* 337, 338 ('A growing body of research demonstrates that the diversity that is being broadcast is not the diversity that is being consumed in people's homes').

[166] The referee/meta-regulator could be a committee of experts rather than an individual.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

the end of the process. The criteria in our example may include elements such as viewer attendance on desired content, changes in the production of desired content, growth or attrition of local content providers, share of the budget spent by the regulator in the course of implementing the regime, and so forth.

At this point potential competitors propose regulatory regimes. One competitor may assert that, given the large number of sources available on the internet, the challenge no longer lies in facilitating content but rather in generating attention to various desirable sources.[167] This competitor may suggest that transparency is sufficient and focus on generating a system of classifying recommended content on the web, labelling it, and perhaps also promoting it on popular internet-based networks with the use of public opinion influencers. I shall refer to the regulator of this regime as 'the labeller'. Another competitor may assert that viewers would be incentivised to access desirable sources and content if they are educated on media consumption at a young age. This regime would therefore focus on promoting media education in schools by, inter alia, introducing quotas for the production of local online content appropriate for children. I will refer to the regulator of this regime as 'the educator'. There may be other proposed types of regulation, but let us assume that the latter two are found by the referee to be the most convincing.

Dividing up market actors between the competitors would be random, but it would be reasonable to ensure that competitors are each assigned a variety of technological platforms. In the past, European regulation of media content focused on the platform through which the consumer received the content. This focus enabled regulators to treat commercial terrestrial television broadcasters differently compared with cable or satellite television broadcasters. Technological developments and convergence have eroded the ability for a straightforward implementation of separate regulatory regimes for different platforms that supply similar services. In Europe, for example, in response to platform convergence, the new Audio Visual Media Services Directive defined 'audiovisual media service' in a broad way,[168] which aggregates all broadcasters of audiovisual content, including all of the above and probably more. While this allows one regulatory agency in each national jurisdiction to impose a content policy on all audiovisual media service providers within the jurisdiction, it undermines the possibility of having regulators of one platform compete against regulators of another platform.[169]

The labeller imposes relatively low costs on the regulated sources and its regime may easily apply to content produced locally and internationally. Indeed, foreign content suppliers may find

[167] Helberger (n 165) 337–69 (arguing that 'the challenge is no longer facilitating content, but capturing attention, which is not subject to regulatory control'); cf Valcke (n 125) 287 (observing that there is no general consensus on the appropriate method to measure exposure diversity, nor about its role and impact on content diversity').
[168] Audio Visual Media Services Directive (n 126), Ch I, art 1(a)(i).
[169] Israel is a unique case of two media regulators with identical goals regulating different segments of the audiovisual media market. Multichannel television, such as cable and satellite television, are regulated by one regulatory authority and commercial terrestrial broadcasters are regulated by another regulatory authority, each of which is empowered by its own separate legislation. This separation seems to have generated informal regulatory competition, particularly observable in the regulation of product placement (the rules governing integration of commercial content in programmes). For a review of this unique case see Baum (n 77) 165–71.

it beneficial to produce high-ranking content if the labelling system turns out to yield more viewers and more attention. The educator, on the other hand, imposes production costs on content suppliers by requiring them to meet quotas. This might lead to some attrition in the market for content production. This regime is also likely to apply only to local content providers unless the educator finds an innovative method of applying the regime to foreign sources. Furthermore, the effectiveness of education needs to be observed over a longer period of time. The differences between the regimes mean that the design of the IRC must allow for a sufficient period for comparative evaluation because the labeller's results may be observable sooner than the educator's results. Oversight throughout the IRC process is also critical. For example, the referee must make sure that the labeller does not label content produced by those foreign content suppliers that fall within the regulatory ambit of the educator. Such oversight will also prevent arbitrage exits, such as content suppliers regulated by the educator migrating to another state in order to be labelled by the labeller.

One cannot ignore the costs. In the production of content, an uncertain regulatory horizon may cause subjects to produce content that aims for the lowest common regulatory denominator in order to guarantee its suitability for any future regulation.[170] This is an inefficient result that IRC designers must bear in mind during the formative stages of the process.

Whether imposing stringent regulation on media market actors creates incentives for regulatory arbitrage is debated. Gibbons argues that regulatory arbitrage in the media is influenced by a variety of factors and not by regulation in and of itself.[171] On the other hand, EU case law indicates that domestic media content regulation does motivate some arbitrage. In the *Veronica* and *TV10* cases, broadcasters chose to locate their transmissions in Luxembourg, outside their destination country, in order to enjoy less stringent programming standards, but they lost their cases in the European Court of Justice (ECJ).[172] In the *Belgium* and *VT4* cases, the ECJ delivered an opposite result.[173] Incorporating exit restrictions can mitigate part of this risk. Small markets can also rely in part on the asset specific investments that existing actors in the media market have invested and on other barriers to exit such as unique languages. Nevertheless, IRC processes in media markets that are often characterised by a small number of actors will have to integrate the prevention of attrition into their objectives.

Eventually, and this may require a few years, the regimes' performance will be measured and the prevailing regime will be identified. Regulating for cultural pluralism in media content can be measured and evaluated.[174] As argued earlier, the case for IRC is most compelling when the

[170] Price (n 14) 143 ('Inconsistency in the law of standards leads to lower investment in programming, more caution and less diversity').
[171] Gibbons (n 84) 254 ('It is likely to be the total media environment, rather than laxity or stringency in regulatory standards, which explains media firms' choices about location').
[172] Case C-148/91, *Vereneging Veronica Omroep Organisatie v Commissariat voor de Media* [1993] ECR I-487; Case C-23/93, *TV10 v Commissariat voor de Media* [1994] ECR I-4795.
[173] Case C-11/95, *Commission v Belgium* [1996] ECR I-4117; Case C-56/96, *VT4 v Vlaamse Gemeenschap* [1997] ECR I-3143. See also Gibbons (n 84) 254.
[174] This might not be an easy task. Current research strives to collect empirical data for the development of a European media pluralism policy. At the moment this work focuses on monitoring the market rather than

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

process is applied to the facilitation of positive rather than negative results.[175] In the context of audiovisual content, it would be better to apply IRC to finding ways to generate more domestic content by content producers than to apply it to finding ways to block the flow of foreign content in the domestic audiovisual content market. Either way, in the audiovisual market, the outcome of the regulatory regime should be relatively observable and therefore fairly easy to evaluate.

After the selection of the prevailing regime, a compensation or equalisation mechanism should be activated. This could be organised, for example, through an administrative tribunal that would accept compensation claims. Assume that the labeller prevails. In such a case it would make sense to compensate some of the subjects in the losing regime for costs incurred in the process of complying with production quotas. Content providers that were shut down as a result of attrition should also be compensated in this case. The compensation might resurrect the latter. On the other hand, if the educator prevails, it seems that there would be no need for compensation payments.

## 7. APPLICATION: SECURITIES REGULATION

### 7.1. THE REGULATORY VOID

Securities markets are yet another field characterised by dynamic innovations, technological advances such as the use of artificial intelligence, externalities caused by international or inter-jurisdictional competition[176] and, consequently, regulatory voids. A seemingly endless chain of regulatory failures have been unravelled during recent decades, including Enron and its progeny of accounting scandals, the subprime mortgage debacle, and so on. All of these support the argument that current securities regulation needs fundamental changes.[177]

The introduction of technology into securities trading has fundamentally changed the scene by introducing superior investors or traders – also known as 'computerised traders', 'algorithmic traders' or 'high frequency traders'[178] – into the market.[179] Traders or investors with superior

proposing regulatory solutions. This work indicates that measuring media pluralism is beyond the infancy stage whereas developing policy and regulatory tools for promoting media pluralism is still a dynamic challenge: Peggy Valcke and others, 'The European Media Pluralism Monitor: Bridging Law, Economics and Media Studies as a First Step Towards Risk-Based Regulation in Media Markets' (2010) 2 *Journal of Media Law* 85.

[175] Abramowicz, Ayres and Listokin (n 24) 962 ('policy makers should experiment with policies that have relatively positive expected effects').

[176] See nn 90–91 and accompanying text.

[177] Markham (n 99) 610 ('Functional regulation is a failure. It is broken beyond repair and should be abandoned. The Enron-era scandals, subprime crisis, and Madoff scandal evidence its failure').

[178] Tom CW Lin, 'Reasonable Investor(s)' (2015) 95 *Boston University Law Review* 461, 473 ('high-frequency investors, for instance, frequently hold positions measured in fractions of seconds without any regard for the fundamentals underlying the businesses of their positions'). Perhaps the regulatory need for more information about computerised trading, how it transpires and how it should be regulated is best exemplified by the use of the term 'black box' to describe this kind of trading activity: Black Box Model, Investopedia, http://www.investopedia.com/terms/b/blackbox.asp.

[179] Lin (n 178) 489 (observing that 'in recent years, high-frequency trading accounted for about thirty percent of all foreign exchange transactions, sixty percent of US equity trading, and forty percent of European equity trading');

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

artificial intelligence technology, stronger computing power, and the ability to locate their computers in close proximity to the stock exchange enjoy an advantage over other market participants, thereby undermining the underlying assumption in securities regulation that investors play on a level playing field.[180] Although this phenomenon contributes to a dangerous erosion of public trust in the integrity of the securities market, securities regulation is still founded on the premise that investors are all more or less the same and that investor protection should thus focus on disclosure obligations imposed on issuers of securities.[181]

Computerised trading has turned markets into a volatile and dangerous trading scene.[182] The so-called 'Flash Crash' is the event most associated with this risk. On 6 May 2010 the Dow Jones Industrial Average dropped an unimaginable 9.16 per cent within less than an hour and then recovered most of that fall.[183] The response of US market regulators to this crash was to introduce 'circuit breaker' programmes, which pause trade for five minutes whenever market fluctuations exceed 10 per cent during the preceding five minutes.[184] Clearly, this measure focuses on mitigating the effects rather than addressing the cause of the problem, which still remains blurred.[185] Consequently, in spite of measures taken by regulators to prevent future flash crashes, numerous such crashes have been recorded in the US, as well in other international stock exchanges, which later adopted precautions similar to those adopted by US regulators.[186] Experts assess that the

Andreas M Fleckner and Klaus J Hopt, 'Stock Exchange Law: Concept, History, Challenges' (2013) 7 *Virginia Law & Business Review* 513, 556–58 (asserting that algorithm-based trading has a tremendous impact on trading yet it may conflict with the principles of securities laws in more than one way).

[180] Lin (n 178) 489–91.

[181] ibid 480 ('In reality, financial regulations designed for a homogeneous population of reasonable investors has frequently been ill suited for protecting a diverse population of real investors').

[182] Tom CW Lin, 'The New Investor' (2013) 60 *UCLA Law Review* 678, 703 ('The enhanced speed and interconnectedness of cyborg finance makes it more endogenously vulnerable to volatile crashes, and the heavy reliance on machines makes the system more exogenously vulnerable to cyber perils').

[183] Graham Bowley, 'Dow Falls 1,000, Then Rebounds, Shaking Market', *The New York Times*, 7 May 2010. The event was subsequently studied and analysed by a joint committee of the Commodity Futures Trading Commission (CFTC) and the Securities and Exchance Commission (SEC): CFTC and SEC, 'Findings Regarding the Market Events of May 6, 2010' (2010) (CFTC/SEC Inquiry), http://www.sec.gov/news/studies/2010/marketevents-report.pdf; see also Lin, ibid 704–05.

[184] CFTC/SEC Inquiry, ibid 7; Lin (n 182) 705 (referring to circuit breaker programmes as 'speed bumps' during periods of extreme volatility, and describing additional measures suggested by regulators to prevent future flash crashes).

[185] There are many inconclusive explanations. Andrei A Kirilenko and others, 'The Flash Crash: The Impact of High Frequency Trading on an Electronic Market', 28 December 2015, http://ssrn.com/abstract=1686004 (high frequency trading exacerbated the Flash Crash of 2010 but it was not the cause); CFTC/SEC Inquiry (n 183) 6 (same view); but more recently US authorities have alleged that the Flash Crash was the result of illegal trading activity by a single trader, Navinder Singh Sarao, operating from his home near London: Nathaniel and Jenny Anderson, 'Trader Arrested in Manipulation that Contributed to 2010 "Flash Crash"', *The New York Times*, 21 April 2015.

[186] Lin (n 182) 705–06 (noting crashes in 2010, 2011 and 2012, and observing that none of the post May 6 flash crash events had the magnitude of the first crash); 'Singapore Exchange Regulators Change Rules Following Crash', *Singapore News.Net*, 2 August 2014, http://www.singaporenews.net/index.php/sid/224382417 (reporting a flash crash in October 2014 on the Singapore stock exchange).

phenomenon is far from waning.[187] Hence, the production of additional information is required in order to understand the phenomenon and propose innovative measures to address it.

### 7.2. The Potential for Intra-Regulatory Competition

In the US, securities regulation is dominated by two particularly prominent regulators: the Securities Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC).[188] This institutional duality can be exploited to generate a meaningful IRC process in order to overcome the current state of regulatory void.

Historically, the dual regulatory structure made some sense. Securities are broadly regarded as means of raising capital or debt whereas the trading in futures contracts is perceived to be primarily a mechanism for pricing commodities and hedging the risk of price volatility.[189] However, the two regulators discussed here have always had and still have an identical mission, which is essential for the functioning of both the capital and the commodities markets: to protect the public from fraud and manipulation in transactions of commodity futures[190] and in securities markets.[191] Nevertheless, the implementation of this identical policy by the two regulatory agencies differs in terms of both jurisdiction and regulatory culture. To exemplify the jurisdictional difference, commodity futures must be traded on a CFTC-registered exchange according to the Commodities Exchange Act,[192] which means no trading in commodity futures can take place outside the purview of the CFTC, unlike securities which may be traded on or off a registered stock exchange.[193] As for cultural differences, such as rules-based versus standards-based regulation, these are cited as an obstacle to institutional merger between the SEC and the CFTC.[194] On the other hand, the regulatory differences make the two authorities the perfect candidates for developing competing innovative regulatory regimes.

Today, the dichotomy between securities and futures regulation is a fallacy. Securities, derivatives and other financial instruments have changed and evolved, and the original delineation between securities markets and commodity futures markets in the US has disintegrated. Investors may now buy and sell instruments with the same underlying financial logic on any stock exchange. Similar to media markets, the markets for financial instruments have converged.[195]

---

[187] Lin (n 182) 706 ('While no other major crash has occurred since the Flash Crash, experts and regulators fear that it is only a matter of time before the "Big One". And in the interim, smaller market disruptions have grown and will likely continue to grow more prevalent as cy-fi advances and proliferates').
[188] For a historical overview of the development of the SEC and the CFTC see Markham (n 99) 552–87.
[189] *Chicago Mercantile Exchange v SEC* 883 F 2d 537, 543 (7th Cir 1989) *certiorari* denied, 110 US 3214 (1990).
[190] See generally Benson (n 41) 1180–81.
[191] ibid 1184.
[192] 7 USC § 2a(ii), (v) (1988) (US).
[193] Benson (n 41) 1183.
[194] Markham (n 99) 591–92.
[195] ibid 587–88 (observing that exchanges now engage in offering platforms for trading in a variety of financial instruments, some of which were previously limited to exchanges regulated by either the SEC or the CFTC).

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

In this case, it is not only that the regulated market has converged and is ready for IRC; the institutional foundations are also available. Ever since the creation of the CFTC in 1974 a debate has been ongoing as to whether it should continue to exist separately from the SEC or whether the twain should meet, and be merged.[196] I take no part in this debate. However, the existence of two specialised professional regulators means that the institutional infrastructure for IRC is available. Furthermore, the natural tendency of regulators to compete with each other is evidenced by the historic fact that these two agencies, with identical objectives and closely related markets, immediately engaged in turf wars.[197] Hence, some competitive power struggle already exists between the agencies. If the two agencies are merged, then an IRC process could be designed within the merged agency. If the two agencies remain separated, they can be pitted one against the other, on the condition that a neutral referee is appointed to oversee the process.

To clarify, some countries adopt a 'twin peaks' system of regulation in financial markets in which one regulator is in charge of prudential aspects whereas another regulator is in charge of consumer or investor protection.[198] This is not equivalent to the IRC process suggested here. This is because, first, the jurisdiction of the two regulators (according to the twin peaks institutional regulatory structure) is likely to overlap from the point of view of regulated subjects, as opposed to IRC in which regulated subjects must each be clearly assigned to one regulator only. Second, in IRC the competing regulators have an identical objective, whereas in the twin peaks model regulators have different objectives which need to be implemented simultaneously, and they are separated because of concern that a merged regulator may give undue preference to one objective over the other.

An IRC aimed at developing innovative securities market regulation would require a further segmentation of the regulated population. The current division of regulated subjects, traders and investors, between the SEC and the CFTC, is imperfect and would have to be altered. Currently, an investor buying stock in a SEC-regulated exchange is within the SEC's jurisdiction, while the same investor buying futures falls within the CFTC's jurisdiction; this means that those investors operating in both markets are subject to overlapping regulation. Therefore, IRC requires that all investors are pooled and then allocated to one competing regulator or the other, regardless of whether they trade in stocks or futures. This is because traders in commodities tend to be of two types: risk hedgers and speculators.[199] Traders in the regular stock exchange are more diverse and include institutional investors and long-term private investors. However, the competitors must develop a regulatory regime that takes into account all types of investor.

The challenges of guaranteeing fairness and regenerating investor trust in securities markets call for the implementation of an IRC process, at least with respect to generating more informed regulation and developing smart ways to regulate trading technology.

[196] For a critical discussion of the attempts to merge the SEC and the CFTC see generally Markham (n 99).
[197] For an overview of some of the early clashes see Benson (n 41) 1185–91. More recent turf wars are discussed by Markham (n 99) 569–87.
[198] ibid 547–48.
[199] Benson (n 41) 1178.

https://doi.org/10.1017/S0021223716000108 Published online by Cambridge University Press

## 8. CONCLUDING REMARKS

Changes and advancements in markets, technologies, geopolitical realities, and even human behaviour make existing regulation obsolete or generate entirely new and uncharted oceans of human practice that require regulation. We tend to have extremely high expectations from our bureaucratic government agencies. Indeed, sometimes we expect regulators to reinvent the wheel. Regulators rarely admit that they have no solution to a problem, and even less so that they are unable to develop a regulatory solution to a new problem. Yet such realities are likely to be quite pervasive.

Take, for example, a media consumer who switches on her television set (assuming some people still use those instruments) and tunes into her favourite audiovisual channel. She might as well be watching the programme on her tablet or smartphone via an audiovisual streaming website. If she does so, she is likely to discover that the programmes are not identical. She may find some content in the streaming version offensive, or discover that some scenes were omitted from the televised version. The mere flip of a channel or swipe of a screen might throw the consumer from a heavily regulated content environment to a regulatory wilderness, or the other way around. With globalisation of media content production and the ability of individual consumers to effortlessly access cross-border content, the legal and regulatory frameworks are at risk of being obliterated. Of course, media regulation is just one example in which technological development and an explosion of information and content degrade regulatory performance to a level that lawmakers could not have foreseen, and leave regulators baffled.

The speed at which human knowledge grows far exceeds the capacity of lawmakers and regulators to adapt or generate regulation that will efficiently and constantly guarantee the effective implementation of important policies. IRC is a possible way out of such a dead end when the threatened societal interests are crucial, the future development of the market is uncertain and the speed of change is rapid. Such challenges can justify the use of IRC as a mechanism for regulatory innovation in spite of the costs it may impose on the agencies and the community of regulated subjects.