

# Designing Institutional Collaboration into Global Governance

C. Randall Henning

## Key Points

- Collaboration among international institutions is essential for high-quality governance in many areas of global policy, yet it is chronically undersupplied.
- There are several obstacles to collaboration, including key countries' using some institutions to constrain others, a strategy of "complexity for control."
- Formal and informal mechanisms can obviate concerns that give rise to this strategy, and the Group of Seven (G7) and the Group of Twenty (G20) should foster collaboration proactively.
- New institutions should be designed from the outset to collaborate with others in a dense institutional environment.

---

## Introduction

Global governance is largely, albeit not exclusively, a matter of collaboration among international institutions. Multiple institutions operate in most issue areas and substantive progress in public health, climate change, development finance and digital regulation, for example, now hinges on constructive relations among institutions. Coronavirus disease 2019 (COVID-19) will not be vanquished by a single institution operating in isolation but instead by a consortium of institutions, initiatives and multi-stakeholder groups that can be called a "regime complex" (Alter and Raustiala 2018; Henning and Pratt 2021).

Numerous opportunities for institutional collaboration are nonetheless being missed and calls for deepening collaboration are common — if not ubiquitous — in discourse on global governance. These are seen in new areas of governance, such as digital privacy, content moderation and platforms (CIGI 2019; Fay 2019; Aaronson 2018); better-established areas, such as climate change and biodiversity (van Asselt 2014); as well as long-established but nonetheless evolving areas, such as international finance, development and trade (Davis 2009; Lipsky 2017; Henning 2019). Greater exchange of information, coordination of operations and harmonization of rules among institutions — which is what "collaboration" means here — would pay off substantially in many issue areas.

The wide variety of institutions that characterizes many emerging regime complexes can complicate collaboration. The United Nations "Road Map for Digital Cooperation," for example, aims to convene not only intergovernmental organizations such as the

---

## About the Author

**C. Randall Henning** is professor of international economic relations in the School of International Service at American University in Washington, DC. He has published widely in the fields of global governance and international and comparative political economy, focusing recently on international regime complexity with applications to crisis finance, regional integration and Europe's monetary union. He is author, co-author or editor of numerous books and reports, including *Regional Financial Arrangements and the International Monetary Fund* (CIGI, 2020), *Tangled Governance: International Regime Complexity, the Troika, and the Euro Crisis* (Oxford University Press, 2017), *Global Financial Governance Confronts the Rising Powers* (CIGI, 2016), *Fiscal Federalism: US History for Architects of Europe's Fiscal Union* (Bruegel, 2012), *Accountability and Oversight of U.S. Exchange Rate Policy* (Peterson Institute, 2008), *East Asian Financial Cooperation* (2002) and *Transatlantic Perspectives on the Euro* (Brookings Institution, 2000). He has also published several articles in academic journals, such as *International Organization*, *Review of International Political Economy* and the *Journal of Economic Policy Reform*. Among other activities, he led the financial cooperation research team for CIGI and INET's New Thinking and the New G20 project. His previous appointments include service as visiting fellow at the Peterson Institute for International Economics. Currently, he is conducting comparative projects on the political economy of regime complexity and fragmentation of global governance.

United Nations Development Programme and the International Telecommunication Union, but also transgovernmental regulatory bodies, private associations of digital firms, civil society organizations and multi-stakeholder groups in a cooperative effort to extend digital access to everyone on the planet on a safe and secure basis by the year 2030 (United Nations 2020). But civil society organizations have different mandates, resources and governance than those of transgovernmental regulatory bodies, and coordinating them effectively to achieve the stated goals will require innovative partnerships (see Slaughter 2017; Hofmann and Pawlak 2021; Bonifai, Newman and Zhang 2021).

Diversity among organizations can sometimes facilitate finding functional or geographic niches and settling upon a mutually compatible division of labour somewhat naturally (Eilstrup-Sangiovanni 2021; Kahler 2020; Johnson 2016; Abbott et al. 2015; Gehring and Faude 2014). Institutions sometimes defer to other institutions that have greater expertise or more powerful members (Pratt 2018). Relatively homogeneous collections of formal international financial institutions can, for example, collaborate on financial rescue programs and lending projects. Multilateral institutions often have observer status in one another's governing bodies. Nevertheless, diverse complexes of institutions and homogeneous ones both can miss opportunities to work together for the benefit of their members.

Collaboration among institutions is not desirable for its own sake, and more of it is not necessarily better than less. Desirability of collaboration should meet the test of material benefit for the clients of institutions or whether institutional interference would degrade progress on poverty alleviation, digital inclusion, public health and other substantive problems. Nonetheless, as a general matter, collaboration is *undersupplied* — which becomes ever more costly as the density of institutions increases in a growing number of issue areas over time.

This policy brief reflects on why this is the case and, recognizing that academic analysis of regime complexity often shies away from recommendations, offers a set of proposals and strategies for designing new institutions and reforming existing ones to facilitate collaboration in a multi-institutional environment. Architects of governance should abandon outdated approaches to organizational design that implicitly assume that

institutions operate in isolation from one another. The brief's recommendations are general, applying to institutions across a broad range, if not the full range, of issue areas of global governance, but the brief uses specific examples to illustrate them.

---

## Chronic Undersupply of Institutional Collaboration

Opportunities for institutional collaboration are missed for a number of reasons. Architects of new institutions often neglect existing institutions when introducing them into an issue space that they will share. Or principals might direct institutions to pursue different objectives, even though they overlap substantively, and memberships of institutions might differ. On other occasions, national officials might create institutions deliberately to offset or counterbalance existing ones and, for this reason, oppose interinstitutional compromise. One additional reason — governments' strategic use of tension among institutions — deserves greater attention than it generally receives, because it both helps to explain the persistence of institutional conflict and underpins an important path for transcending it.

Calls to establish formal mechanisms for cooperation among institutions often go unheeded because national governments value the role that they themselves can play in mediating conflicts among the institutions — a pattern that can be called a complexity-for-control strategy. Governments anticipate that institutions with overlapping mandates will come into conflict from time to time. But they also value the opportunities that such conflicts offer to tilt outcomes to their liking while mediating among the institutions. Setting up mechanisms to resolve these conflicts ahead of time (*ex ante*) would *disintermediate* member states from conflict resolution, depriving them of such opportunities. Such governments usually want to avoid costly conflicts among institutions, but they often prefer “just-in-time” collaboration (*ex post*) to setting it up in advance in order to retain institutional control (Henning 2017; 2020).

Institutional interaction in euro-area financial assistance is an example of *ex post* collaboration for control. Member states of the euro area

could have established robust mechanisms for consultation between the International Monetary Fund (IMF) staff and the European institutions and defined protocols for communication and sharing of information on national policies in anticipation of a crisis, when establishing the euro area or during the decade that followed. Instead, they deferred these decisions until 2010 when a crisis was upon them and they had to sort out their differences in the heat of the moment. The delay was wasteful, but it reduced the possibility that the national governments could be bypassed by direct dealing among the secretariats of the institutions. Governments are especially inclined to leave collaboration among institutions to the last minute in issue areas where institutions have previously carved out a degree of autonomy and strayed from preferences of key principals, as the European Commission had done with respect to Germany prior to the euro crisis. The complexity-for-control strategy can also be a feature of collaboration among non-governmental and multi-stakeholder institutions; any type of member can, in principle, seek to restrain institutions in this way.

---

## Design for Collaboration

In designing international institutions, therefore, states and other principals should draw from a tool kit of strategies and techniques for promoting collaboration. These tools range from administrative matters of organizational management to high politics of global governance. These are grouped under five principal strategies.

### Create Bureaucratic Mechanisms

Governments, their officials and institutional secretariats can foster collaboration by introducing or developing a number of mechanisms. While some are fairly straightforward, they bear enumerating and prioritizing because they do not create themselves.

→ **Confer on each institution a general mandate to cooperate with other institutions in the same field.** The Articles of Agreement of both the IMF and the World Bank state that these institutions “shall cooperate with any general international organization and with public international organizations having specialized responsibilities in related fields” (article X and

article IV, section 3, paragraph (a), respectively). Such clauses are far from sufficient, of course, but collaboration would be yet more difficult without them. Replicating them or something close to them in new organizations is the least that enlightened architects should do. General injunctions to cooperate are not superfluous because institutions face a strong general tendency, and indeed an imperative, to seek and preserve institutional autonomy. Secretariats are formally obliged to advance the purposes defined in their charters, and this is often used to justify uncompromising positions vis-à-vis other institutions. When institutions have substantively overlapping mandates, such autonomy can render institutional interaction dysfunctional. Charter-based directives to collaborate pre-empt this problem as a formal matter and reduce institutional resistance (see also Slaughter 2004).

- **Designate the offices that are to be in charge of institutional collaboration and the channels through which they should act.** Sorting out these arrangements in the heat of crises is likely to prove problematic; to the extent possible, these should be identified *ex ante*, before the need arises. This recommendation might again seem mundane, but it is not by any means self-evident for institutions that approach a crisis together. It requires management to make tough choices, because departmental prerogatives will be modified, and personal careers will be put on new trajectories by the designation of offices to be at the centre of the action.
- **Establish memoranda of understanding on exchange of information.** Information is the life blood of international institutions; without it, even the most well-funded and well-staffed organizations can become irrelevant. But important information is likely to be politicized — as the World Health Organization well knows — and member countries wish to control its collection, internal use and dissemination. Governments might be willing to provide market-sensitive information on the financial condition of banks to the Financial Stability Board (FSB), for example, yet block its being shared with other institutions. The failure to provide information — such as the European Central Bank’s (ECB’s) intervention in sovereign bond markets under the Securities Market Program with the European Commission

and IMF in the early years of the euro crisis, to provide another example — can weaken or undermine collaboration. Protocols that identify what information can be shared with whom, and on whose approval, exactly, should be decided in advance, which will usually require discussion among governments in the executive boards of these organizations.

- **Provide incentives to staff at all levels to contribute to cross-institutional teams.** Too often, staff time devoted to collaboration is effectively disincentivized, if not punished, as a diversion from institutional goals. But because an institution’s success is now increasingly bound up in its ability to collaborate, high-performing institutions should want to reward staff effort accordingly, for example, as a specific criterion in job performance reviews (Gutner 2020). Such incentives could be implemented on a reciprocal basis by institutions such as the Organisation for Economic Co-operation and Development (OECD), the European Commission and the World Trade Organization.
- **Review external cooperation through formally established procedures at fixed intervals.** The Independent Evaluation Office (IEO) of the IMF recently reviewed that institution’s collaboration with the World Bank (IEO-IMF 2020). An external review of the Greek loan programs for the European Stability Mechanism (ESM) (ESM 2020) contained a section on relations with the European Commission and the IMF. Such reports were ad hoc but could serve as models for studies to be conducted on a periodic basis in the future. Such studies can be undertaken internally as well and, in either case, be reviewed by executive boards. It will assist collaboration for secretariats, and national officials who seek to influence them, to know in advance that post-conflict assessments will be undertaken.

## Anticipate Fear of Disintermediation

By understanding the reasons for the chronic undersupply of mechanisms of collaboration in advance of institutional conflict or crisis, as discussed above, they can be addressed constructively. Specifically, features that assure principals in advance that they will not be sidelined by international civil servants should be designed into collaboration. These features include providing information to governments about intersecretariat coordination, at the outset of the process and on

an ongoing basis thereafter, and building into these mechanisms early, periodic reviews by executive boards. Such consultation would grease the skids for cooperation, for example, between the IMF and the World Bank on climate change and its ramifications for member countries (IEO-IMF 2020). Innovations in digital technology can facilitate principals' reviews and assuage concerns about secretariats' "drift" from agreed policy directions. When governments nonetheless hesitate to approve arrangements for collaboration, joint meetings of the executive boards of both institutions could be convened to resolve such differences. Although rare, the IMF and the World Bank have convened such meetings (Gutner 2020). Mechanisms for assuaging principals' concern about drift are especially important in situations where institutions are brought together when mandates are being reviewed to meet new challenges in changing environments, as they are in digital governance.

## Nurture Informal Mechanisms

Where formal mechanisms for collaboration cannot be established, *informal* procedures should be looked to as substitutes or prospective complements. Sometimes, these might be the only way to lubricate the collaboration process. Informal channels can be vulnerable to insider dealing and abuse by more powerful states with national appointees embedded in secretariats, and informalism could be used to circumvent accountability. But greater transparency of informal mechanisms can serve as a safeguard against such abuse and reassure stakeholders that collaboration advances the common purposes of the two memberships rather than evades or compromises the rules of the institutions.

Such transparency can be both inward and outward facing. Inwardly, it reassures members of executive boards and the other departments of the secretariat that are excluded from or marginalized by the interinstitutional process. Similarly, external transparency reassures outside actors, non-governmental groups and private sector institutions that informal mechanisms of cooperation are being used to solve substantive problems rather than to evade guidance, disclosure or accountability.

In cases where the secretariats of two institutions come to an impasse — where one or the other cannot collaborate without crossing a red line — conflict might have to be mediated by member governments. Such mediation is almost always

informal, but it does not have to be opaque or illegitimate. When the European Commission, the ECB and the IMF reached just such an impasse over the third financial assistance program for Greece at the end of May 2015, German Chancellor Angela Merkel convened their three heads at the Chancellery in Berlin to broker a compromise. Some important details were not immediately disclosed, but the meeting was announced in advance, briefed to the press afterward, and met with general acceptance and, indeed, relief, in both the media and European financial markets, that a way forward had been charted (Henning 2017, 232).

The G20 has sponsored an elaborate edifice of engagement groups for business, think tanks and civil society organizations around its ministerial and summit meetings. In so doing it has accommodated the diversity of the types of institutions that engage in G20 issues and thereby provided input to official proceedings. The process is sometimes formal and sometimes informal; in both cases, it is generally well received and thus builds participatory legitimacy ("input legitimacy").

## Specify Areas in Which Competition Is Acceptable

Somewhat paradoxically, institutional collaboration can also involve defining where cooperation is *not* necessary. Such areas tend to fall into two broad categories. In the first, cooperation is not necessary because institutions and issues are configured such that action in one area is naturally advanced by institutions in another. Reforestation and combatting global warming, for example, are mutually reinforcing in this way (Johnson and Urpelainen 2012). In the second category, active competition by two or more institutions can advance the interests of their members or cooperation among the principals. Such can be the case in economic surveillance, analysis and forecasting, as conducted by the European Commission, the OECD and the IMF, for example. In these areas, competition can force institutions to sharpen their analytic tools and weed out low-performing units. For their part, members might well perceive distinct advantages to being able to choose from a range of analysis and examine the differences among institutions' forecasts, rather than being confronted with a monolithic view of the institutions.

Furthermore, given the size and number of cross-cutting institutions that have developed in some areas — advancing the UN Sustainable Development Goals comes readily to mind — complexity might exceed the ability of a deliberate, rational approach to coordinate the various institutions. In cases of high complexity, competition might be a useful strategy for deciding which institutions receive further grants of authority and budget allocations.

Institutions that perform multiple governance functions might find themselves competing and collaborating with the same partner(s) simultaneously. In finance, for example, multilateral institutions might have to collaborate in setting lending conditions for borrowers in joint programs, for example, while at the same time compete in providing technical assistance to non-program countries or surveillance of the world economy. Institutions usually find conflicting advice to be embarrassing, but that should not be dispositive when there are substantive benefits. Competing and collaborating simultaneously might be awkward for international bureaucrats, but this problem is not essentially different from the situation confronting employees *within* individual organizations.

However, the areas that are appropriate for competition and collaboration do not necessarily reveal themselves to secretariats as obvious. They should be delineated by institutions' principals, or the member states, in the case of formal international organizations. Delineation should specify which forms of competition and collaboration are appropriate under which circumstances. Once so defined, the governing bodies should oversee subsequent implementation and review operations periodically to ensure they are respecting the established guardrails.

## Harness the G20 and the G7

Owing to their bird's-eye view, global reach and non-legal character, the G20 and the G7 have a comparative advantage in serving as steering committees for the work of the international institutions (Bergsten and Henning 1996; Boughton 2012; Fioretos 2019). They cannot dictate the work of most institutions, because their membership is far from universal. But the G20 and G7 countries can come to common views about grants of authority and divisions of labour and thus coordinate their national

positions inside the formal governing bodies of the institutions. Such views can carry the day within institutions that weight formal influence, such as voting rights, by economic size or population, in particular when these countries act collectively.

The G20 has been important on some occasions where new grants of authority have been bestowed. During the global financial crisis of 2008–2009, for example, the G20 decided that responsibility for reinvigorating international financial regulation would be vested primarily in the FSB rather than the IMF, but that the two should work together (Helleiner 2010; Pauly 2010). Generally speaking, however, the G20 has had a weaker appetite for follow-through in terms of oversight of operations and the collaboration mandate. Unless and until an acute conflict arises, the members of the G20 would usually probably prefer not to follow up at all.

The G20 should review institutional collaboration proactively, in particular among those institutions that it mandates to work together and to support the G20 process directly. Do the institutions follow the spirit of the mandate? Does their collaboration achieve stated goals? Has the G20 used its input effectively and, if not, what changes should be made? The G7 can serve as a caucus within the G20 or, if consensus cannot be reached, address these questions on its own initiative. As an institution, the G20 tends to cycle through periods of vigorous engagement during global crises followed by phases of existential malaise (Kirton 2013; Bernes 2020). Oversight of institutional collaboration between crises would bolster the G20's *raison d'être* in a meaningful way.

---

## Conclusion

When creating new institutions and reforming existing ones, principals and the secretariats on which they often rely should be cognizant of the *dense institutional environment*. Rather than setting up an institution myopically on the assumption that it will operate autonomously in its issue area, which has often been the default paradigm, such architects should design institutions to operate in a regime complex. They should anticipate institutional conflict and build into their new institution a robust capacity to engage other institutions. They should further anticipate that other institutions will in time be layered on top

of the one they are creating, and that its success as an organization will depend on its *ability to adapt* flexibly to the emergence of such partners.

## Author's Note

The author would like to acknowledge two anonymous reviewers of a previous version of the manuscript for very constructive comments.

---

## Works Cited

- Aaronson, Susan Ariel. 2018. *Data Is Different: Why the World Needs a New Approach to Governing Cross-border Data Flows*. CIGI Paper No. 197. Waterloo, ON: CIGI. [www.cigionline.org/publications/data-different-why-world-needs-new-approach-governing-cross-border-data-flows/](http://www.cigionline.org/publications/data-different-why-world-needs-new-approach-governing-cross-border-data-flows/).
- Abbott, Kenneth W., Philipp Genschel, Duncan Snidal and Bernhard Zangl, eds. 2015. *International Organizations as Orchestrators*. Cambridge, UK: Cambridge University Press.
- Alter, Karen J. and Kal Raustiala. 2018. "The Rise of International Regime Complexity." *Annual Review of Law and Social Sciences* 14: 329–49.
- Bergsten, C. Fred and C. Randall Henning. 1996. *Global Economic Leadership and the Group of Seven*. Washington, DC: Peterson Institute for International Economics.
- Bernes, Thomas A. 2020. "COVID-19: The Failure of the G20." Opinion. Centre for International Governance Innovation, May 26. [www.cigionline.org/articles/covid-19-failure-g20](http://www.cigionline.org/articles/covid-19-failure-g20).
- Bonifai, Niccolo W., Abraham L. Newman and Qi Zhang. 2021. "The Digital Regime Multiplex." Working Paper, Georgetown University. Washington, DC.
- Boughton, James M. 2012. *Tearing Down Walls: The International Monetary Fund 1990–1999*. Washington, DC: IMF.
- CIGI. 2019. *Models for Platform Governance*. Essay Series. Waterloo, ON: CIGI. [www.cigionline.org/publications/models-platform-governance/](http://www.cigionline.org/publications/models-platform-governance/).
- Davis, Christina L. 2009. "Overlapping Institutions in Trade Policy." *Perspectives on Politics* 7 (1): 25–31.
- Eilstrup-Sangiovanni, Mette. 2021. "Ordering Global Governance Complexes: The Evolution of the Governance Complex for International Civil Aviation." *The Review of International Organizations*, February 27. <https://doi.org/10.1007/s11558-020-09411-z>.
- ESM. 2020. *Lessons from Financial Assistance to Greece: Independent Evaluation Report*. Luxembourg: ESM.
- Fay, Robert. 2019. "Digital Platforms Require a Global Governance Framework." In *Models for Platform Governance*, 27–31. Waterloo, ON: CIGI. [www.cigionline.org/publications/models-platform-governance/](http://www.cigionline.org/publications/models-platform-governance/).
- Fioretos, Orfeo. 2019. "Minilateralism and Informality in International Monetary Cooperation." *Review of International Political Economy* 26 (6): 1136–59.
- Gehring, Thomas and Benjamin Faude. 2014. "A Theory of Emerging Order within Institutional Complexes: How Competition among Regulatory International Institutions Leads to Institutional Adaptation and Division of Labor." *The Review of International Organizations* 9 (4): 471–98.
- Gutner, Tamar. 2020. *Approaches to IMF-World Bank Collaboration: A Historical Perspective*. Background Paper to the IEO Report, BP/20-10/02. Washington, DC: IMF.
- Helleiner, Eric. 2010. "What Role for the New Financial Stability Board? The Politics of International Standards after the Crisis." *Global Policy* 1 (3): 282–90.
- Henning, C. Randall. 2017. *Tangled Governance: International Regime Complexity, the Troika, and the Euro Crisis*. Oxford, UK: Oxford University Press.
- . 2019. "Regime Complexity and the Institutions of Crisis and Development Finance." *Development and Change* 50 (1): 24–45. doi:10.1111/dech.12472.
- . 2020. *Regional Financial Arrangements and the International Monetary Fund: Sustaining Coherence in Global Financial Governance*. Special Report. Waterloo, ON: CIGI. [www.cigionline.org/publications/regional-financial-arrangements-and-international-monetary-fund-sustaining-coherence](http://www.cigionline.org/publications/regional-financial-arrangements-and-international-monetary-fund-sustaining-coherence).
- Henning, C. Randall and Tyler Pratt. 2021. "Hierarchy and Differentiation in International Regime Complexes: A Theoretical Framework for Comparative Research." Manuscript, American University and Yale University. [www.peio.me/wp-content/uploads/2020/01/PEIO13\\_paper\\_66.pdf](http://www.peio.me/wp-content/uploads/2020/01/PEIO13_paper_66.pdf).
- Hofmann, Stephanie C. and Patryk Pawlak. 2021. "Governing Cyberspace: Issue Frames, Institutional Springboards and Frame Consolidation." Working Paper.
- IEO-IMF. 2020. *IMF Collaboration with the World Bank on Macro-Structural Issues*. Evaluation Report. Washington, DC: IMF.
- Johnson, Tana. 2016. "Cooperation, Co-optation, Competition, Conflict: International Bureaucracies and Non-Governmental Organization in an Interdependent World." *Review of International Political Economy* 23 (2): 737–67.
- Johnson, Tana and Johannes Urpelainen. 2012. "A Strategic Theory of Regime Integration and Separation." *International Organization* 66 (4): 645–77.
- Kahler, Miles. 2020. "The Arc of Complex Global Governance: From Organization to Coalition." Paper presented at the American Political Science Association's Annual Meeting, September 10–13.
- Kirton, John J. 2013. *G20 Governance for a Globalized World*. Surrey, UK: Ashgate.
- Lipsky, Phillip Y. 2017. *Renegotiating the World Order: Institutional Change in International Relations*. Cambridge, UK: Cambridge University Press.

- Pauly, Louis W. 2010. "The Financial Stability Board in Context." In *The Financial Stability Board: An Effective Fourth Pillar of Global Economic Governance?* edited by Stephany Griffith-Jones, Eric Helleiner and Ngaire Woods, 13–18. Special Report. Waterloo, ON: CIGI.
- Pratt, Tyler. 2018. "Deference and Hierarchy in International Regime Complexes." *International Organization* 72 (3): 561–90.
- Slaughter, Anne-Marie. 2004. *A New World Order*. Princeton, NJ: Princeton University Press.
- . 2017. *The Chessboard and the Web: Strategies of Connection in a Networked World*. New Haven, CT: Yale University Press.
- United Nations General Assembly. 2020. "Road Map for Digital Cooperation: Implementation of the Recommendations of the High-Level Panel on Digital Cooperation." Report of the Secretary-General. May 29. New York, NY: United Nations.
- van Asselt, Harro. 2014. *The Fragmentation of Global Climate Governance: Consequences and Management of Regime Interactions*. Cheltenham, UK: Edward Elgar.



---

## About CIGI

The Centre for International Governance Innovation (CIGI) is an independent, non-partisan think tank whose peer-reviewed research and trusted analysis influence policy makers to innovate. Our global network of multidisciplinary researchers and strategic partnerships provide policy solutions for the digital era with one goal: to improve people's lives everywhere. Headquartered in Waterloo, Canada, CIGI has received support from the Government of Canada, the Government of Ontario and founder Jim Balsillie.

---

## À propos du CIGI

Le Centre pour l'innovation dans la gouvernance internationale (CIGI) est un groupe de réflexion indépendant et non partisan dont les recherches évaluées par des pairs et les analyses fiables incitent les décideurs à innover. Grâce à son réseau mondial de chercheurs pluridisciplinaires et de partenariats stratégiques, le CIGI offre des solutions politiques adaptées à l'ère numérique dans le seul but d'améliorer la vie des gens du monde entier. Le CIGI, dont le siège se trouve à Waterloo, au Canada, bénéficie du soutien du gouvernement du Canada, du gouvernement de l'Ontario et de son fondateur, Jim Balsillie.

---

## Credits

Managing Director of Digital Economy **Robert Fay**  
Program Manager **Aya Al Kabarity**  
Senior Publications Editor **Jennifer Goyder**  
Graphic Designer **Sami Chouhdary**

Copyright © 2021 by the Centre for International Governance Innovation

The opinions expressed in this publication are those of the author and do not necessarily reflect the views of the Centre for International Governance Innovation or its Board of Directors.

For publications enquiries, please contact [publications@cigionline.org](mailto:publications@cigionline.org).



This work is licensed under a Creative Commons Attribution — Non-commercial — No Derivatives license. To view this license, visit ([www.creativecommons.org/licenses/by-nc-nd/3.0/](http://www.creativecommons.org/licenses/by-nc-nd/3.0/)). For re-use or distribution, please include this copyright notice.

Printed in Canada on Forest Stewardship Council® certified paper containing 100% post-consumer fibre.

Centre for International Governance Innovation and CIGI are registered trademarks.

67 Erb Street West  
Waterloo, ON, Canada N2L 6C2  
[www.cigionline.org](http://www.cigionline.org)