2022-2025
Scientific Cycle

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Global Economies

The Pierre Elliott Trudeau Foundation's Leadership Program offers a three-year leadership journey for each cohort of Scholars that is contextualized by a scientific theme with interdisciplinary dimensions, and which reflects a timely and significant set of issues for the future of Canada and the world. *Global Economies* will be the scientific theme for the 2022-2025 programming cycle, allowing Scholars to build on the core perspective of trade to explore the economic implications of a number of key trends–including the global power shift, the rise of the digital economy, intensifying economic inequality, and the global pandemic. The theme will enable members of the Foundation's community to reflect on what the future global economy could look like for more prosperous and equitable outcomes in Canada and the world.

Trends in Global Economies

The past two decades have witnessed profound transformations that have impacted our global economy and international trade. Among others, we have seen a surge of digitalization that led to an expansion of the digital economy[1], strong shifts in trade relations through the ascent of nationalist economic powers[2], the emergence of bilateral or multilateral hybrid natural extraction security arrangements, and an omnipresent surveillance society[3]. Although these changes present previously unimaginable opportunities for innovation, including new forms of working and more interconnectedness, a number of detrimental socio-economic impacts have either continued, escalated, or emerged. The world has also witnessed a devastating global health crisis due to the COVID-19 pandemic for the first time in a century.

Several international trade and economy scholars, experts, and the media are particularly intensifying their attention around **the rise of inequality** at local, national and international levels; as well as multiple challenges relating to, among others, health and governance, ethics, climate change, social and political polarization, democracy and civic engagement, migrants' and labour rights. Questions arise about how to harness shifts in the economy for the global good in a way that supports inclusive, equitable and sustainable development. Global inequality spans many fields and orientations, as well as all government and policy choices. It shapes in-depth reflection on local economies and the world economy alike, and compels research

that is innovative, impactful, and oriented towards a better future.

Global Economies explores issues around the interconnectedness of local and global economies in the 21st century, focusing on global trade, as well as global public goods and the digital economy. This 2022-2025 Pierre Elliott Trudeau Foundation Scientific Cycle theme will also be shaped by the current pandemic, and by national and international policies that are being developed in its aftermath, as well as the many variants of pre-existing trade protectionism it has made to crystallize. The diversity of subjects developed stems from the plurality of perspectives that is at the very heart of discussions on global economies. To engage in the main questions set out in this paper, Scholars will be able to refer to, reflect on or supplement the impressive body of knowledge developed by economists, as well as lawyers, sociologists and political scientists, interdisciplinary researchers in fields of social sciences, arts and humanities, and the contributions of Indigenous and policy experts.

Global Interdependence and International Trade

The interconnectedness of our global economy is not a recent phenomenon. As old as trade itself, it goes back to the history of civilizations and conquests – the Atlantic trade, the Silk Road, and the Mediterranean were all transcontinental trade routes with complex transactional mechanisms. Today's economies are more interdependent than they have ever been. Over the past decades, various trends have emerged in economics, with transformations to national and global economies impacting global production chains, international trade, and workforces worldwide[4].

While the incomes of both lower-income and higher-income populations have risen, inequality has also intensified at the macro and micro levels[5]. Although some domestic reforms are made easier or even possible by international treaties and national policymaking[6], trade agreements such as the European Economic Area, the Canada-United States-Mexico Agreement (CUSMA), and the ASEAN-China Free Trade Area are also associated with a variety of unforeseen impacts and imbalances, sometimes depleting whole sectors. This is amplified by the effects and growing complexity of global supply chains, demonstrated by worldwide disruptions to food and health supplies during the COVID-19 outbreak[7].

In the early 1990s, a pro-free trade quasi consensus dominated policymaking led by the United States. Many "mainstream economists [failed to] realize that globalization would lead to 'hyperglobalization' and huge economic and social upheaval, particularly of the industrial middle class in America[8]." Downplaying harbingers of the tough Chinese competition to come, and major political movements such as the Brexit referendum in 2016, economic nationalism and protectionist measures in rising states, and the past Trump administration or, conversely, gradual opening of other economies like Brazil, shook the foundations of global trade[9]. A recently elected Social Democrat German chancellery after the 16-year tenure of Angela Merkel's Christian Democratic Union party may also have potential economic repercussions across Europe and global trading partners[10]. Economic analysts currently point to a need to re-think the design of policies targeted towards the connectivity of social systems on a global scale[11].

The effects of a globalized economy are still the source of major debates among economists, political scientists, legal scholars, and sociologists. Trade typically has significant impacts on income distribution, employment, and food security in low-and middle-income countries, many of whom have suffered the consequence of an overdependence on the multilateral trade system[12], especially in the wake of the 2007 financial crisis[13]. Moreover, while globalization has indeed reduced distances, "economic activities, such as production and employment, occur unevenly across space within countries and, as a result, globalization impacts various regions differently[14]".

1. Interdependence and the Economic Centre of Gravity

Several global models, including a leading report from the McKinsey Global Institute[15], show the world's economic centre of gravity shifting away from the west and towards the east, extrapolating to lie somewhere between India and China in 2050[16]. Proclaimed the "Chinese Century" by Joseph Stiglitz[17], the new era ushered in by this shift in power and influence has major implications on trade, manufacturing, and global competitiveness. Some regions, such as Africa, and Latin America and the Caribbean (LAC) are expected to benefit from novel sources of external investment. On the other hand, new frameworks must be envisioned to support development strategies and to counteract any asymmetric risks that occur from global market failures in an integrated world economy, such as unemployment and marginalization of the poor. Furthermore, with imports expected to exceed exports, the trade deficit between these regions and China will continue to widen[18]. There is a recognized need for emerging economies to develop comprehensive, transparent, and sustainable external debt management systems[19].

As this financial and political centre of gravity keeps shifting, significant turbulence can also be expected with worldwide dynamics in many areas of trade outside of purely economic dimensions. The increasing wealth of Asian states is for instance developing at the same time as new patterns of political populism gain ground in the west[20]. An important effect is progressively unimpeded interventionism of traditionally authoritarian regimes in economic and security matters. Economies around the world will need to re-examine global economic governance and its long-term effects on the respect of fundamental human rights and values. Scholars have an important role in shaping the future of our global economy. The process requires creative problem-solving, interdisciplinary collaboration and leadership on a wide range of matters such as security, diplomatic relations, environmental sustainability, technology and innovation, international trade and labour laws, migrations, and the role and influence of international or multilateral organizations such as the World Trade Organization[21].

1.1 Supply Chains and Food Security

The environmental, financial, and health crises of the last decades have had profound and lasting impacts on international trade, specifically on the management of supply chains. The vulnerability of the global supply chain became all the more evident with the supply shock felt around the world in February 2020 when China – the world's second

largest economy[22] – shut down its trade and production in an attempt to counter the spread of COVID-19 within its borders[23]. The ripple effect was felt worldwide with temporary mass stock shortages, from raw goods to consumer products, to pharmaceutical and medical supplies[24]. In this context, "charting a sustainable course to recovery from the [COVID-19] pandemic" triggers an inevitable need for changes to global approaches to trade and development[25].

The pandemic and its aftermath represent the most telling example of a global interdependent economy, as well as a critical source of inequality between the developing and developed world. It is becoming urgent to promote mass inoculation because "continued vaccine scarcity and the related threat of dangerous new viral variants are the top risks to the rebound in global economic activity and trade[26]". Even if the wealthiest countries reach their vaccination targets, analysts, the WHO and World Bank have estimated that the global economy stands to lose as much as US$ 9.2 trillion to US$ 11 trillion[27] because of demand shocks, sick workers, and lockdowns. With a 4.3% contraction of the world GDP, the United Nations reports that this extraordinary socioeconomic crisis represents the first increase in extreme poverty since 1998, and the loss of the equivalent of 255 million full-time jobs relative to the level in 2019[28].

As important as trade is, we have seen that it can be slowed down by this global crisis, especially in a context of critical gridlock in international institutions. As a result, domestic economies may need to develop internal capacities to avoid over-reliance on international markets for key goods. Several versions of protectionism have been at the forefront of trade policy in the past few years, especially in the US context, from the grassroots "buy-local" movements to the steep tariffs imposed on imports from major partners during the Trump administration[29]. With the "big growth of globe-spanning supply chains[30]", economic nationalism is far from being a relic of a past US administration, and the role of policymaking in trade and supply chains is more relevant as ever.

On another front, global food supply chains, now indispensable to food security, cannot be examined from a strictly domestic point of view. Innovative approaches must be adopted that can lead to global economic cooperation and empowerment of low and middle-income countries in building their own domestic production and supply chains[31].

Finally, with increasingly hotter summers on record and frequent droughts across the world, we have entered "a long-term, systemic food crisis[32]". According to the most recent UN annual food security report, nearly 10% of people on Earth or an estimated 768 million people were undernourished in 2020 – representing an increase of 118 million people from 2019[33]. Yet, the emergence of cutting-edge technologies in the agri-food sector could provide developing nations and remote regions with means to produce food with very little investment. New bio-design strategies such as "salt-tolerant food crops, renewable energy sources like algal biofuels, and organic bioremediation and climate change mitigation[34]" have the ability to increase production in a sustainable way. Recent investigations have also pointed to the use of blockchain technology – a new digital

technological approach to ensure data integrity, trust, transparency, and full traceability of transaction records across all agri-food value chain partners[35]. Research is still needed to ensure these technologies respond to stakeholders' usage needs along the full supply chain to ensure sustainability[36]. The success of this transition will also depend largely on access to technology. Still, food security remains a complex economic issue that must be examined from an interdisciplinary approach that also considers, among several aspects, the economic activity of impoverished populations, trends in sustainable consumption, climate change, effects of conflict-affected areas or health crises like COVID-19 on food supply, and the permanent loss of traditional agricultural structures and livelihoods[37].

1.2 Equality and Equity

The disparities in the global supply chain are due in part to historical contexts of systemic inequalities that have carried over to today's trade treaties, and that continue to affect minority populations. For instance, a history of capitalism shows that historical international exchanges, and notably Atlantic trade, were a catalyst of economic growth in Early Modern Europe[38]. The slave trade had lasting impacts on all regions involved and their economic development[39]; from the convergence between specific cultural and economic forces[40], which essentially shaped trade and economic landscapes for centuries to come, including race-based laws and policies that created much of the social and economic inequality that exists to this day[41]. Whereas corporations are under increased scrutiny to develop corporate social responsibility initiatives to counter wealth inequality, current social movements seek to right this imbalance by redistributing the costs of such prolonged inequality, notably calling for institutions "to bear a larger share of these collateral costs—spending additional resources to avoid conflicts and mistakes and to compensate victims—instead of leaving them to fall disproportionately on minority communities[42]."

Compounded to these challenges, many structural health problems exist within all nations of the world, which were not addressed while the COVID-19 pandemic unfolded. Health security, which became a priority for many developed nations over the past decades, seems to have supplanted other crucial values such as solidarity or human rights[43]. It is imperative that this new frame through which global events are being re-conceptualized simultaneously integrate the protection of human rights and consider rapidly shifting challenges, including growing stigma and discrimination towards specific communities, groups or affected persons, exacerbated gender and social inequalities (e.g., caregiving roles, domestic violence, limited access to sexual or reproductive health services), and vulnerabilities of certain populations (e.g., the elderly, people with disabilities, people who are homeless, refugees, migrants, prisoners)[44].

Economies of low- and middle-income countries, and fragile systems around the world also face high risks in the context of social isolation due to weak healthcare infrastructures, challenges in access to clean water, high incidences of malnutrition, other chronic illness, large numbers of displaced people and poverty[45]. Global health now needs international cooperation more than ever, and developing nations would benefit most of all from transfer of resources and technical support[46]. New generations of leaders represent

the greatest promise within this context of global connectedness for innovative solutions, expanded vision, and relationship-building.

1.3 Natural Resource Extraction and Security

Natural resource extraction is one of the world's largest economic sectors, accounting for a quarter of the global GDP[47]. The industry is nevertheless "mired by financial, economic, governance, social and environmental concerns, leading to the so-called resource curse or paradox of plenty[48]". It plays a dominant role in 81 countries and nearly 70% of those living in extreme poverty[49]. Multinational corporations (MNC) with head offices in higher-income countries contribute and are intertwined in this paradox, with countless reports of violations of human rights, security, environmental and humanitarian law committed through their foreign investments and subsidiaries[50].

A series of high-profile court cases brought before national and international courts against MNC operations, and scrutiny of transnational corporate activities by international human rights treaty bodies, the media and civil society organizations, has led to a progressive development of internationally agreed upon "voluntary" standards, such as the UN Guiding Principles on Business and Human Rights[51] or the OECD Due Diligence Guidance for Responsible Business Conduct[52]. First steps at legislating the conduct of MNC extractive industry practices[53] have ranged from the implementation of applicable domestic criminal or civil law against violations of human rights, to more express requirements in the law, such as the "duty of vigilance[54]" for corporations enacted in French law since 2017[55]. Broader reporting requirements of corporations are also contained in legislation such as the EU Non-Financial Reporting Directive[56] and the UK Companies Act[57] with respect to environmental protection, social responsibility and treatment of employees, respect for human rights, anti-corruption and bribery, and diversity on company boards. In Canada – home to more than 70% of the world's largest mining corporations – the Extractive Sector Transparency Measures Act[58] was passed in 2014 mandating extractive firms to publicly disclose payments to various levels of government in Canada and abroad (including Indigenous governments and state-owned entities), in compliance with the Extractive Industries Transparency Initiative of 55 implementing countries.

While these initiatives represent major steps towards greater implementation of the rule of law in the extractive industries sector, the regulation of this sector is still a complex area that requires multi-state and multi-sector collaboration, oversight, and consultation with stakeholder communities – including local populations and Indigenous Peoples[59]. There is further a need to work concertedly with new open market economy states in strengthening these regulatory environments[60]. As mentioned above, the greatest emerging player in this field has been China with a significant expansion of energy, construction, mining, and metal companies investing abroad since the "Going Out Policy" initiated in 1999 and the launch of China's Belt and Road Initiative (BRI) in 2013[61].

The past decade has also seen a change in strategies to protect MNC operations and resources, with new forms of hybrid security partnerships between private security companies, public security actors and other stakeholders, such as non-governmental

organizations. A central justification for these new partnerships resides in the "inability and/or unwillingness of state entities to independently address the myriad security concerns that arise in sites of resource extraction[62]". Hybrid security governance has also varied with uneven impacts across different segments of populations and natural livelihoods. Security arrangements may involve domestic elites, armed civilians or police or navy forces to protect private interests while overlooking the importance of safeguarding local communities[63]. Certain security arrangements have further been suggested to pursue other geopolitical goals[64].

Relevant to the natural extraction industries, and migrant flows and security on a broader level, new forms of global trade have emerged in recent years through the export of AI surveillance technology by major powers such as China, the USA, Germany, France, Japan, South Korea, and the UK[65]. Our technologically modern "smart cities" increasingly serviced by 5G wireless networks are using different types of electronic methods, from free public Wi-Fi to sensors and cameras to collect data on everything from traffic flows to commercial operations to air quality. This omnipresent surveillance carries important safety, health, and consumer benefits, while simultaneously eroding any practical anonymity through our daily activities and transactions as we travel, communicate, bank, work and consume digital goods[66]. This carries significant implications on national and international security policies worldwide, global technology competition, individual freedoms, human rights and privacy[67].

The substantial impact of the extractive industries and security measures in the global economy cannot be understated in contexts of human rights, environmental sustainability, local communities' livelihoods, security, and international governance. The most creative and favorable outcomes will largely depend on the ability of 21st century scholars, analysts, and decision-makers to address these issues through international and interdisciplinary collaboration, strong ethics and leadership, and inclusive and multi-sectoral participation of stakeholders.

Questions

- What are the impacts of global outsourcing on human rights?
- What are some ways to sustain the increase in living standards of emerging economies?
- How is economic interdependence defined in the shifting power balance we experience today?
- Can the global trading system be maintained and improved when there is profound disagreement between major actors on critical issues like human rights and the rule of law?
- How can institutions, such as the World Trade Organization, and agreements adjust to new economic trends?
- How are trade agreements affecting the regulation of domestic labour law and reshaping workplace conditions?
- What can we expect from emerging global trade relationships?
- How should Canada position itself in international trade considering food security and lower-income nations?
- How does the geopolitical nature of China affect global trade and global supply chains?

- What are the implications of individual economies' geopolitical goals and interventions on global economies?
- Should there be a redistribution of social costs to make up for historical wrongs, and if so, how?
- What can be done to address the governance gap in the extractive industries sector, and more broadly, in multinational corporate activities?
- Who are the various local, national, regional, and international institutions and stakeholders, and the roles they have taken or could take in ensuring transparency, accountability, the rule of law, and inclusivity in the field of natural resource extraction?
- What are some of the innovative approaches, strategies or actions that individuals and corporations can take to strengthen corporate social responsibility in the 21st century?

2. The Digital Economy

The Digital Economy has affected almost all sectors of the economy at a worldwide scale, including the global supply chain. Most importantly, new technologies have had significant impacts on food supplies: through cutting-edge innovation, the agri-food industries are poised to change the landscape of food consumption and production worldwide[68]. This threatens to cause massive unemployment and revenue loss in Western agricultural sectors while offering new opportunities to developing countries, as "AI will enable low-income countries to leapfrog in several sectors[69]." Digital and interactive technologies (e.g., virtual, augmented or mixed realities), have also had notable impacts in many other sectors of the global economy, including creative industries, arts and culture, education, health, information, public safety, and security.

Inquiry into digital economies can be subdivided into two categories: digital-based technologies and digital banking, commerce, and finance.

2.1 E-commerce and Digital Trade

Since the early 2000s, the emergence of online marketplaces for business to business (B2B) and business to consumer transactions (B2C) has been on the rise, disrupting the nature of intermediation in trade. Online markets, such as eBay, Amazon, and Alibaba, now connect consumers and manufacturers without the intermediary of retailers in the value chain or in transactions[70]. E-commerce, defined as "any business (the process of either buying or selling products or services) that is done through online medium (internet)[71]", has experienced exponential growth since the 2000s, which multiplied with the advent of COVID-19 and stay-at-home safety measures. Early research since 2020 points to an average hike of about 10-30% in online shopping, while other businesses have seen around a 50% increase, ranging from 150% for grocery stores, to 500% for medical sales, and 200% in subscription services revenue[72]. Other sectors, such as travel, and luxury good and fashion sales experienced a fall in 2020[73].

E-commerce has been lauded for its integration of AI capabilities that support, for example, improved customer service through 24/7 chatbots, market data analysis, product content management, sales forecasting, and others[74]. On the other hand, e-commerce transactions come with certain risks due to digital tactics like "phishing, ransomware,

spoofing, pagejacking, hacking and others[75]". People are experiencing growing fraud in their online transactions including identify theft, credit card and merchant fraud, chargeback, triangulation, data breach, denial of service, and email account compromise[76]. Countering these fraudulent strategies may largely depend on parallel innovative techniques, such as a recently successful evaluation of deep learning topologies and high performance, distributed cloud computing to enable financial institutions to reduce losses[77]. Governments are also seeking better control on taxation in the digital world following the seismic shift towards e-commerce platforms. And while tax havens are not in any way a new trend, the emergence of a digital dimension to this practice has made it all the more complex to regulate[78].

Another corollary of the digitization of services and trade has been to redefine the economy through the creation of online platform firms or "online places or infrastructures (i.e., websites and mobile apps) designed specifically to facilitate transactions and other valued exchanges of goods, information and opinion[79]". The platform economy has pervaded a multitude of sectors affecting over 5.2 million establishments of the US economy alone[80], ranging from the well-known Facebook, Twitter, WhatsApp, and other social media, to retail, as mentioned above, transportation (e.g., Lyft, Uber), real estate (e.g., Realtor.com), travel and accommodations (e.g., Airbnb, TripAdvisor, Booking.com), entertainment (e.g., Netflix, Spotify, Tencent, YouTube) and so forth[81]. The power of the platform economy has also led to the creation of global ecosystems affecting economic activity of other actors. Among several examples, Booking.com has integrated hotels across the world into its ecosystem to book 1.5 million rooms per day, or Amazon currently has nearly 2 million active sellers worldwide[82].

There is also the issue of global competition and de facto monopolies, which impacts the revenues of whole industries such as the press. These enormous digital enterprises are major job creators around the world but also remain largely unregulated. This is incongruous with the fact that many of their popular products were developed with "hundreds of billions of dollars of public money over many decades[83]", such as the National Science Foundation for Google's algorithm, and the Defense Advanced Research Projects Agency for the Internet, the GPS, and Siri[84]. The low tax rates these corporations pay on the sizable benefits derived among other things from market control and selling freely acquired users' data to advertisers are said to be "perverse, given that their success was built on technologies funded and developed by high-risk public investments[85]". The accountability of these non-government entities is certainly a key issue and is especially relevant in the debate about the Internet as a global public good.

2.2 Digital Currencies

Since the beginning of the pandemic, digital transactions have replaced cash in many daily operations[86], adding to the already growing trend towards the use of digital currencies. Besides the well-known Bitcoin, there are "more than 5000 cryptocurrencies and blockchain-based tokens in circulation[87]", the vast majority of which are backed by private networks. However, government-supported

currency networks are gaining ground. Some nations such as China and the United States have made advances in the field which could start putting pressure on the current global balance. As such, the Bank of Canada is preparing the implementation of a digital loonie. This "digital currency can create novel payment channels, new transactional communities, and safe networks-of-relations — all of which with potential to further secure Canada's monetary identity[88]." This project comprises technical aspects as well as governance and policy implications[89] and will also address security concerns, such as money laundering and counter-terrorist financing implications, as well as issues of volatility, a typical feature of "older" cryptocurrencies[90]. Cryptocurrencies that eliminate traditional monetary third parties have the potential to disrupt the current economic system but, with transparency and proper governance, also have the potential to promote new wealth creation. In the near future, the public sector will need to make important decisions to shape the trajectory of digital currency development both locally and globally[91].

2.3 Inequalities in an Increasingly Digital World

A great number of inequalities are either increased or caused by technological imbalance between different hemispheres and, in the words of Swedish international health expert Hans Rosling, by the "disease of globalization deficiency[92]." For instance, member States of the OECD hold 90% of the world's technology and environmental goods market, a reality that has slowed down and complicated the liberalization of trade in the same market. Similarly, impoverished populations and in particular women and girls are still "heavily impacted by the digital divide[93]." After years of outsourcing[94], followed by the "gig economy", digital labour and "clickwork[95]" are two of the newer trends in global labour practices. The latter, a very poorly remunerated, repetitive task supporting countless social network operations, is a stark representation of labour-related inequalities among nations and populations. Research is only beginning to emerge on new forms of organizing of the tech labour force through digital tools[96], but this again leads to major discrepancies between the possibilities offered to users of social media and those who do not have similar access to technology.

The digitization of platforms has, in some cases, suppressed distances in trade and finance, whereby micro and small enterprises find easily accessible tools to reach worldwide audiences. At the same time, they are faced with uncertainty and elevated compliance costs of national regulations on cross-border data flows[97]. Many rural populations also struggle with difficult or non-existing access to technologies and the Internet, an issue brought both by lack of infrastructure as well as international and state policy failures concerning the technology sector[98]. Initiatives have only recently and sporadically started to take place to address barriers created by a digital divide between urban and rural settings in education[99], mobility[100], access to government services[101], and health care[102], among others. With over 45% of the world's population (over 3 billion people) from rural areas, leading researchers in human-computer interaction have stated that the "time is ripe for the radical foregrounding of rural computing...

understanding, designing, and building computing technologies that are particular to the needs, aspirations, and practices of rural communities around the world[103]".

Another major issue in today's global economy is the digital creation of economic value. With their massive weight, some multinational digital corporations exert an imbalance of social and political power they hold in terms of knowledge distribution and communications[104]. Through their ability to avoid taxes, these entities contribute to supply-side economics, reinforcing not only their tangible effects on economic inequality, but also the narratives that are imposed on the mainstream discourse: "the belief ... that the only way to improve ordinary people's lives is to make the rich richer and wait for the benefits to trickle down[105]". Such a narrative would have had a deleterious effect on important elements of the social contract, such as fiscal acceptance[106]. Others still believe that these multinational digital corporations help reduce the digital divide by decentralizing and providing access to information and communication tools to marginalized populations[107]. Does the end justify the means?

Questions

> How do or can we reconcile preserving employment and livelihoods in the agri-food sector of developed countries while offering opportunities for increased wealth to developing countries?

> Can sustainability be achieved through digital technologies?

> How do government-backed digital currencies impact current business practices?

> What are the primary roles and responsibilities for governments and public-sector financial institutions with respect to digital currencies?

> Will access to AI assist developing countries in creating wealth?

> What policies could be developed to help governments better regulate the tax contributions of digital giants?

> How has or how can the digital economy and innovation impact certain populations, employment and fields or sectors of work?

3. Global Public Goods

With an interdependent global supply chain, new technologies and limited shared resources, global public goods (GPGs) take an increasingly important role, notably because they represent common interests in the international community. However, GPGs are difficult to regulate, cannot be addressed by individual countries or entities, and raise questions of accountability, international policymaking, and cost sharing.

The concept of a GPG has gained increasing attention in international economics over the past decade[108]. Originally developed by philosophers such as Adam Smith and David Hume, the integration of the concept of a GPG into economic frameworks was first introduced in the mid-20th century through seminal works of Paul Samuelson and Mancur Olson[109]. A GPG can essentially be defined by two characteristics: non-rivalry (one person can use it without diminishing its availability to others) and non-excludability (available to everyone, whether they contributed to producing it or

not). Examples include traffic lights, clean air, law and order, and peace and security[110].

Despite the notion that GPGs are said to extend to all countries, peoples, and even generations[111], their non-rivalrous and non-excludable characteristics are debatable as they are affected by the realities that permeate global economic interdependence[112]. One may cite, "[f]inancial instability, climate change, communicable diseases, illicit trade, international terrorism, natural resource scarcities, and threats from new technologies... joining entrenched problems like those of nuclear proliferation, geopolitical conflict, and – still – unconscious human deprivation"[113]. It therefore becomes paramount to examine GPGs from a policy standpoint and to understand and address incentives that are working against their provision.

Perhaps the most topical GPG at this moment is public health, which the COVID-19 pandemic has shown presents a "series of interlinked challenges[114]" in which cost and resource sharing, as well as the adaptation of international laws, are essential[115]. The G20 Leaders' Declaration signed at the Riyadh Summit in November 2020 recognized "the role of extensive immunization as a global public good[116]". GPGs also include "curbing climate change, instituting universal regulatory practices, eradicating infectious diseases[117]" and the UN also identifies basic human dignity, global peace, and concerted management of knowledge including respect for intellectual property rights as crucial GPGs. Finally, several institutions and states are aspiring to an "institutional infrastructure harmonized across borders to foster such goals as market efficiency, universal human rights, transparent and accountable governance, and harmonization of technical standards[118]."

Through international and comparative field studies, academic research can contribute to innovative solutions to local, national, and international governance of GPGs. Existing studies have proposed, for example, alternatives to public/private binary governance or anthropocentric discourses that would create a greater space for decolonized governance systems, market environmentalism, civil society, community economies and/or a plurality of stakeholders' participation in developing resource governance frameworks[119].

3.1 The Internet: A Global Public Good?

A major issue regarding GPGs is whether the Internet, or access to it, can be considered a global public good, or a human right – or both[120]. In 2016, the UN passed a resolution "stressing the importance of applying a human rights-based approach when providing and expanding access to the Internet" and also "requested all States to make efforts to bridge the many forms of digital divides[121]". Given the paramount importance of digital communications, Internet access remains a marker of inequalities, as is computing capacity, and traditionally marginalized populations still have limited or no access to the Internet[122]. Developmental and political issues abound when it comes to lack of Internet access and the capacity for analytical processes such as AI. Besides the lack of access in remote areas, there have been recent occurrences of states shutting down or blocking parts of or all access to their populations, notably in Egypt and Syria in 2011, India in 2015, and Turkey in 2016. Studies suggest these shutdowns cost countries billions of dollars in lost trade[123]. In 2021, is access to information on the Internet a GPG? To answer this, society must examine it from the lens of development economics, poverty, regulation of the private sector, digital

trade, and a range of technological outlooks, from electrical engineering to the management of data, and from gender inequality to international law.

3.2 Arts, Culture and Creative Industries as Public Goods?

In addition to natural, infrastructural, or technological goods, the question arises of whether arts, culture and creative industries can be considered a "public good". In terms of their global economic value, cultural and creative industries were generating US$ 250 billion in global exports revenues a year and annual revenues of US$ 2,250 billion prior to COVID-19[124]. Categorizing these sectors as "cutting-edge industries" or as a "public service" becomes relevant in relation to the level of public protection or financial support they receive[125]. This is important for instance in a time of pandemic crisis, which has had undeniable impacts on the arts and culture sectors worldwide, with the exception of services sustained through digital solutions, such as video-on-demand, streaming and online prints[126].

The response to the question is complicated however by the importance of protecting intellectual property rights that run counter to the traditional non-rivalrous and non-excludable characteristics of a GPG. Cultural property can also be "seen as the object of individual rights, property rights, but also as 'communal property' or public patrimony, which is essential to the sentiment of belonging to a collective social body and to the transmission of this sentiment to future generations[127]". Other complexities arise in the context of growing mediation of the arts and cultural heritage through digital technologies to engage with audiences, artists, users and researchers[128]. Recently, Australian creative arts scholars suggested an interdisciplinary reconstruction of the economic categorization of "public value" to encompass arts and culture industries, instead of considering them as GPGs. This may better address their governance in relation to their quantifiable and qualitative value[129]. Such solutions are interesting to explore at a time that is crucial to revive these sectors.

3.3 Public-Good Economics and Issues of Growth

The value of the perpetual growth principle has been questioned for decades now, and this line of inquiry seems ever more relevant as we increasingly focus on the limited resources of the biosphere. For instance, ecological economics is based on the notions that the economy is an open system that is linked to both society and the physical environment, and that there are limits to growth. Since the 1980s, ecological economists such as Herman Daly have criticized the neoclassical economics notion of growth, inasmuch as it "formally denies the concept of the futility limit[130]".

Similarly, several alternatives have been proposed to either complement or replace the GDP as a quantitative measurement. In 2020, the World Economic Forum launched a call for action for "renewed international effort to converge on and implement economic policy targets beyond GDP growth"[131]. While labour regulation has been criticized for impacting negatively national economic performances[132], some institutions and countries have begun to implement measures that emphasize the well-being of populations alongside economic

growth, as criteria to assess societal welfare in economic policy. For instance, the UNDP developed the *Human Development Index* to measure key dimensions of human development, to emphasize that economic growth rate could not be the ultimate measure for the development of a country[133]. The Ministry of Housing and Urban Affairs in India developed an *Ease of Living Index* to measure the quality of life, economic ability, and sustainability of citizens to assess whether economic policies were successful[134]. Aside from placing a disproportionate weight on women and girls worldwide, climate change also reveals existing inequalities through the smaller carbon footprint that women produce (23.5%) versus men's (76.5%), a result of long-standing economic and social inequality[135]. Daly's *Index of Sustainable Economic Welfare* proposes an alternative to the GDP to measure qualitative development. The 2018 World Inequality Report published by the World Inequality Database, suggests that GDP does not account for capital depreciation or externalities such as environmental degradation. Furthermore, new methodology involved in this alternative to GDP-based measurement considers income flows and offshore wealth[136], which "can make a large difference for particular countries[137]". Seeking environmental sustainability also means looking at social welfare through perspectives such as well-being budgeting[138]. In Canada, past public policies should be examined for sustainable development and their impact on the well-being of Indigenous communities.

Examining the limits of physical resources inevitably leads to considering energy industries and their by-products. The 2015 Paris Agreement, and, more recently, the November 2021 UN Conference on Climate Change: COP26 in Glasgow, defined greenhouse gas emission targets, cap and trade structures, and resources, effectively treating the environment as a GPG[139]. Some economists believe government interventions in the fossil fuel sector to be necessary, to leverage taxation and regulations, and subsidize the development of alternative technologies.

Similarly, nudge theory has been used to implement positive reinforcement in consumers' behaviours, notably by the US and UK governments in domestic policymaking targeting a variety of initiatives, from obesity reduction (public health) to safety promotion[140]. Government incentives may tax or subsidize, punish or reward, all to nudge populations into a desired behaviour. The study of behavioural economics assesses how and whether these policies actually work using concepts such as risk aversion and framing effect[141].

Questions

> How do we conceptualize policies around technology-based public goods, such as the Internet?

> What are the roles of strategic interactions and coalitions between contributing or non-contributing countries regarding specific GPGs?

> Is there a conflict between preserving global goods and advancing national interests, or is it a false dichotomy[142]?

> What is the value of ensuring public protection and financing of the arts, creative industries, and culture for the global economy?

> What issues are worth exploring for government regulations that are meant to nudge human behaviour?

> How do we reach global sustainability goals without overstraining a recovering economy?

> How can Canada implement an economic recovery plan that is environmentally sustainable?

Conclusion

From international trade to digital technologies, and from global interdependence to the notion of public goods, a great range of topics have been proposed to explore future trends for global economies. It is crucial to work towards understanding short- and long-term political and social implications of policymaking and economic accountability, and their impact on trade, as the rise of inequality "cannot be viewed as a mechanical, deterministic consequence of globalization or technological change[143]". To carry out policies for the public good, one avenue would be to "no longer [take] technology and ethics as given, but as steps in the total problem to be solved[144]".

The rise of inequalities is a process with roots in previous eras, but not one that is unavoidable. The multifaceted issue of inequality raises many complex questions, which must be looked at from an interdisciplinary and collaborative approach, to propose achievable outcomes that are smart, responsible, and fair. Perhaps one can look to French economist Thomas Piketty's approach to developing solutions. He proposes that democratic deliberation be based on mutual respect and the sharing of knowledge: "To promote equality, our societies must welcome the clash of big ideas, be drivers of innovation and knowledge sharing[145]" – thus, favour the democratization of knowledge in all its forms.

Now, more than ever, Engaged Leaders must work with a plurality of perspectives to find solutions to the issues facing global economies today.

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