## DISCUSSION PAPER SERIES NO. 2019-08

# Understanding the New Globalization: Implications for the Philippines

Roehlano M. Briones, Michael Ralph M. Abrigo, Connie B. Dacuycuy, and Francis Mark A. Quimba



The PIDS Discussion Paper Series constitutes studies that are preliminary and subject to further revisions. They are being circulated in a limited number of copies only for purposes of soliciting comments and suggestions for further refinements. The studies under the Series are unedited and unreviewed. The views and opinions expressed are those of the author(s) and do not necessarily reflect those of the Institute. Not for quotation without permission from the author(s) and the Institute.

#### **CONTACT US:**

# Understanding the New Globalization: Implications for the Philippines

Roehlano M. Briones Michael Ralph M. Abrigo Connie B. Dacuycuy Francis Mark A. Quimba

PHILIPPINE INSITITUTE FOR DEVELOPMENT STUDIES

September 2019

#### **Abstract**

The world economy has undergone at least three waves of globalization; currently the fourth wave is on-going, sweeping away old certainties are being overturned. The Philippines, which has hitherto been reaping the growth dividend from the third wave of globalization owing to a functioning democracy, achieving monetary stability, liberalization of trade, and related market reforms. In a fast-changing world, the strategies forged previously may need a fundamental rethinking to enable the country to survive, and thrive, in an era of global transition.

There are four key features of the new globalization: economic restructuring; worsening global inequality; threats to international cooperation in providing global public goods (GPGs); and weakening of traditional ties of social cohesion and trust. The paper develops set of recommendations for policymakers and other stakeholders in the Philippines.

Navigating the new globalization will be difficult, but not impossible: despite the drift towards mistrust and isolation, the paper argues for a renewed drive towards international cooperation, collaboration among public and private organizations, and adaptive policies in dealing with rapid economic and social change.

**Keywords**: Globalization, economic restructuring, inequality trends, global public goods, social cohesion

# **Table of Contents**

1.	Introduction	4
2.	Economic Restructuring	5
2	2.1 Changes in Global Trade	5
2	2.2 GVCs under FIRe	8
3.	Worsening Inequality	10
	3.1 Inequality Trends	10
	3.2 Drivers of Income Inequality	12
4.	Threats to Provision of Global Public Goods	13
5.	Building Trust and Social Cohesion	19
6.	Recommendations for The Philippines	23
(	6.1 Economic Restructuring	23
	6.2 Worsening Inequality	24
	6.3 Global Public Goods	26
	6.4 Social Trust and Cohesion	27
7.	Concluding Remarks	29
Bib	oliography	29
l id	st of Figures	
LI.		
Fig	gure 1: Export-to-GDP ratio of the world and Philippines, 1946 – 2014	6
Fig	gure 2: Transport and communication cost index (1930 = 100), 1930 - 2005	6
Fig	gure 3: Nominal growth rates of different value-added creation activities, 1996-2014	8
Fig	gure 4: Share of global growth captured by income groups, 1980 – 2016	11
Fig	gure 5: Share of income deciles in total household income (%)	12
Fig	gure 6. United Nations System Revenues, 2010-2017	15
Fig	gure 7: United Nations Expenditures by Category, 2010-2017	16
Fig	gure 8. Impact of the Trade War on the Philippines, by Sector	18
Fig	gure 9: Scatterplot of GDP per capita and indicator of trust	21
Fig	gure 10. Most trusted relationships, by shares in opinion poll (%)	22

# Understanding the new globalization: Implications for the Philippines Roehlano M. Briones, Michael Ralph M. Abrigo, Connie B. Dacuycuy, and Francis Mark A. Quimba\*

#### 1. Introduction

Past waves of globalization, as categorized by Vanham (2019), were characterized by rapid growth of world trade, often accompanied by cross-border investment. The **first wave** began from the 19<sup>th</sup> century, and lasted up to World War I. In the first wave, steamships and railways made possible the explosion of *transportation-enabled trade*. The share of world trade in GDP increased from just 6 percent 1800, to 14 percent in 1914. The first wave however ended in an era of catastrophic conflict and economic malaise over the course of two world wars.

In the **second wave**, *post-war recovery* from 1945 onward followed together with the cautious rebuilding of the international community. Innovation in the form of using the combustion engine on land, sea, and air, reinvigorated the expansion of world trade, despite the chill of a prolonged Cold War.

Recovery ramped up with the **third wave**: wherein *post-Cold War acceleration* commenced after the demise of the Soviet Union, and the emergence of a unipolar world in the 1990s. The pace of world trade growth rose dramatically. The World Trade Organisation (WTO) was created, and several regional free trade areas were established or widened.

Information and communication technologies (ICT) of the Third Industrial Revolution provided the impetus for the third wave, facilitating the unbundling of production and consumption activities and formation of global value chains (GVCs). World trade reached half of global GDP by 2000. Imports of intermediate goods alone accounted for nearly a fifth of global GDP in 2008 (Economist 2019). Unprecedented globalization was accompanied by unprecedented decline in world poverty, from 41 percent in 1981 down to 20 percent in 2005 (World Bank 2018), a phenomenon dubbed the Great Escape (Deaton 2013). The collapse of the Soviet Union provoked a triumphalist sense of victory for democracy, capitalism, and liberal values, even an "end of history" (Fukuyama 1991).

Nonetheless as early as the late 1980s, the US Army War College began inculcating the mindset of grappling with a world of volatility, uncertainty, complexity, and ambiguity (VUCA) its officers. Its foresight is well-vindicated. Dadios et al (2018) discuss acceleration of technological change with the *Fourth Industrialization Revolution* (FIRe) or *Industry 4.0*. Jobs, occupations, skills, social interaction, and income prospects, are being transformed in unpredictable ways at a dizzying pace. As the world of the third wave recedes, a new type of globalization is emerging, christened "Globalization.4.0" in the 2019 World Economic Forum (WEF) meeting. Today's world is one in which old certainties are being overturned. Growth of world trade has slowed down since the global financial crisis of 2008. Nationalism and confrontation are now taking center stage over cosmopolitanism and international cooperation. The social fabric is unravelling, as advocates of extreme positions of hatred, violence, and ignorance, seem to be going mainstream.

\_

<sup>\*</sup> Research Fellows, Philippine Institute for Development Studies

The passing of the old global order is raising grave concerns about the ability of countries like the Philippines to continue their economic and social advance. The foundations of the Philippines' current rapid growth phase were laid during the world of the third wave. The country is now reaping the growth dividend from adoption of a functioning democracy, achieving monetary stability, liberalization of trade, and related market reforms (Clarete, Esguerra, and Hill 2018). In a fast-changing world, the same strategies forged under Globalization 3.0 may need a fundamental rethinking to enable the country to survive - and thrive - in an era of global transition.

The new globalization is characterized by the following key features:

- 1) Economic restructuring;
- 2) Worsening inequality trends;
- 3) Threats to international cooperation in providing global public goods (GPGs);
- 4) Weakening of social cohesion and trust.

Worldwide **economic restructuring** of production over the past three decades saw the rise of GVCs, which are now themselves being transformed under Industry 4.0. Meanwhile, **income inequality** has been rising within most of the world's regions, at different rates – relatively rapidly for North America and Asia; moderately for Europe; and little movement in the Middle East, Sub-Saharan Africa, and Brazil (Alvaro et al 2018).

Resurgent nationalism and populist leadership, both in OECD and emerging economies, e.g. United States, United Kingdom, Russia, China, Philippines, and Brazil, has led to the **unravelling of international cooperation agreements**. This in turn has jeopardized the **provision of global public goods** such as peace and security, economic integration, safeguarding health, and achieving sustainable development and environmental protection, particularly in the face of climate change. Lastly, populism has intensified *identity politics*, accentuating polarization, and **weakening social cohesion**, including longstanding norms of trust associated with democratic and public institutions.

These four features are elaborated in the rest of the paper: economic restructuring is discussed in Section 2; trends in global inequality in Section 3; provision of global public goods in Section 4; and weakening social cohesion in Section 5. Section 6 concludes with a set of recommendations for policymakers and other stakeholders in the Philippines to proactively navigate the troubled seas of the new globalization.

#### 2. Economic Restructuring

#### 2.1 Changes in Global Trade

Both world and Philippines' trade underwent sharp acceleration after the end of World War II, but saw a reversal in trend after 2008.

Figure 1 shows a sharp increase in world export-to-GDP ratio (expressed in percent) in the 1940s and 1950s from its nadir at the close of the second World War. By the mid-70s it eventually matched the peak previously achieved in the early 1900s (12 percent), surpassing it and advancing to historical highs, with a new peak of 26 percent in 2008. The Philippines began 1946 with a spike in its export -to-GDP ratio, then tapering off in the 1960s. Growth of the export-to-GDP ratio for the country then spurted upwards in the 1990s, fell into the doldrums again in the latter half of the 2000s. Globally as well, the financial crisis of 2008

precipitated a steep drop in exports as a share in GDP, after which it recovered erratically, and still far below its peak level.

Figure 1: Export-to-GDP ratio of the world and Philippines, 1946 – 2014

Source of basic data: www.ourworldindata.com.

Declining transport cost was a major factor in accelerated growth of global trade, but the pace of decline has slowed since the 1980s.

Shipping and transport costs have declined from 1950 to 2004 because of significant technological developments in transport and logistics, particularly in road transport, modern aircrafts, and containerization in ocean shipping. Relative to the 1930 baseline, international calling costs, passenger air transport cost, and sea freight transport cost, all fell steeply in the 1930s and 1940s, and kept falling; by 2004, international calling costs were only a minute fraction of costs in 1930, while cost of passenger air transport and sea freight are a few percentage points of their levels in 1930.

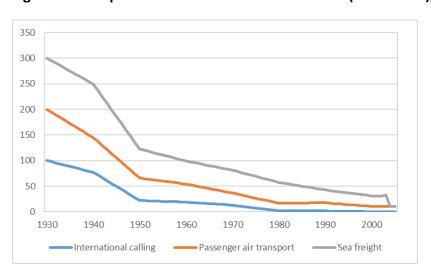


Figure 2: Transport and communication cost index (1930 = 100), 1930 - 2005

Source of basic data: www.ourworldindata.com.

Between 1955 and 2004, air freight prices fell from USD 3.87 per ton-kilometer to less than USD 0.30, in 2000 prices (Hummels 2007). The greatest reduction in the cost of air transport coincided with the uptake of jet engines in aviation in 1955-1972. Technological improvements increasing the speed of ships and the improved efficiency in ports due to containerization (i.e., less time needed to load and unload ships) have also reduced the indirect costs of ocean shipping (WTO 2008).

However, transport and tariff costs (as a share of the value of the goods traded) has ceased to decline after 2008 (The Economist 2019). This, coupled with a slowdown in tariff reduction and the *servicification* of production (i.e., structural shift from manufacturing to services), have pushed international goods trade to slow down (Arslan et al 2018).

Global trade saw the rise of trade in intermediate goods as production was re-organized into GVCs.

GVCs resulted from the fragmentation of the production process, which allows different segments of production to be carried out in different countries. Up until 2008, GVCs have been increasing in number and in terms of length (stages). This advancement of GVCs coincided with the reduction in trade costs, the establishment of the WTO, and the adoption of policy prescriptions brought about by the "Washington Consensus," i.e., that governments had only to provide a strong set of "horizontal" policies, such as education, infrastructure, and macroeconomic stability, and be open to trade in order to succeed (Gore 2000; Gereffi 2015).

Developing countries and emerging economies were able to attract lead firms of GVCs to set up in their countries by offering an abundant source of raw materials, a large number of low-wage workers, a set of highly capable manufacturers, and a growing domestic market (Gereffi 2015). Examples of these lead firms are mega-corporations, such as General Motors, Ford, IBM and HP. Gereffi (1994; 2015) also noted that global retailers (e.g., Walmart, JCPenney, and Carrefour), global marketers (e.g., Nike, Liz Claiborne, and Polo Ralph Lauren), and supermarkets and food multinationals (e.g., Tesco, Sainsbury's, Kraft Foods, and Nestlé) also shifted operations to emerging economies. Through participation in GVCs, these developing and emerging economies were able to gain entry into global markets and diversify their exports (Rodrik 2018; Worldbank 2017).

Globalization led to an increase in trade of services and servicification.

Services are now recognized as a critical source of economic activity and value creation. The advancement in information, communication, transport technology, and production processes have been 'unbundled,' relaxing traditional constraints to trade in services. Remote workers can now participate in operations of companies located all over the globe. Examples of such services include ancillary services to production, such as repair and maintenance services, management services, and various back-office services (Low 2016). The value of global commercial services trade rose by 8 percent or USD 5.80 trillion in 2018 (Koopman 2019). The global policy environment has yet to catch-up with this change (Low 2016). Key issues

\_

<sup>&</sup>lt;sup>1</sup> The GVC can be thought of as the result of the unbundling of the production process, and is closely linked to three constraints (i.e., trade costs, communication costs, and face-to-face costs). In the pre-globalized world, all of these three were high; thus, production tend to be within communities. However, when steam was discovered and utilized, trade costs decreased and has led to the first unbundling albeit communication costs and face-to-face costs has remained high. This first unbundling resulted in manufacturing activities being clustered. With the advancement of ICT in the 20<sup>th</sup> century, communication costs have decreased as well, which led to the second unbundling of the production process. However, face-to-face costs remained to be high. This second unbundling is the GVC (World Bank 2017).

include: availability of quality data for monitoring the performance of the sector; and adequacy of General Agreement on Trade in Services (GATS) or other preferential services agreements to address the rapid developments of this sector.

#### 2.2 GVCs under FIRe

Value chain participation of developing economies is now on the whole shifting away from complex towards simple GVCs.

As the BRICS (Brazil, India, China, and South Africa) deepen their internal division of labor and utilize increasingly advanced technologies (animated by FIRe innovations), they expand the range of intermediate inputs they can produce domestically. This favors simple GVCs (i.e. GVCs where domestic value added for production undergoes only one border crossing). Hence, contrary to the trend observed before the 2008 crisis, participation in complex GVCs are on the decline among emerging economies, though increasing among other developing economies (World Bank, 2017) Moreover, the recent economic recovery in developing economies appears to be driven mainly by traditional trade, as well as purely domestic production activities (Figure 3).

Figure 3: Nominal growth rates of different value-added creation activities, 1996-2014

Source: University of International Business and Economics global value chain indexes derived from the 2016 World Input-Output Database.

Source: University of International Business and Economics global value chain indexes derived from the 2016 world input-output database

The movement of goods, capital, and people will be profoundly affected by future innovations in digital technology and the internet

Artificial intelligence, automation, and blockchain that will innovate how and what we trade. Autonomous driving for example has the potential to reduce transport costs. An Indian starthas created a relay network of long-distance trucking based on artificial intelligence and big data, realizing advantages from: connecting drivers to trucks, dividing day-long drives into half-day relays; realizing time-savings (of up to 50 percent) by applying machine-learning algorithms to predict precisely when trucks will arrive and leave pit-stops and at which fueling stations drivers should refuel (WTO 2018b).

By leveraging the Internet of Things (IoT) to reduce the amount of goods lost in cargo delivery and to optimally plan shipping routes, global cargo shipping and transport will become more efficient.

Companies are already utilizing FIRe technologies to improve their efficiency. Maersk, a leading Danish shipping company, has been applying digital technology to reduce cost and optimize their logistics operations. The company implemented a real-time container management system on its refrigerated containers that allows the company to gather performance data, such as temperature, power supply, and location. The data is transmitted and stored in the company's private data cloud where these are analyzed in real-time. The system has allowed Maersk to reduce cargo claims stemming from malfunctioning reefer units, poor supplier handling of off-power periods, and wrong temperature set points. Physical inspection time of refrigerated containers is also reduced because of this system. Finally, Maersk is now able to expand its services to its customers by providing consultancy services on the use of smart sensors and data analytics.

Digitalization and blockchain reduces cost of coordination of GVCs, while 3D printing will affect organization of these chains.

Digital technology reduces the cost of coordination (including filing of documents, processing of forms, coordination, and communication) across borders and countries. Using the trade platform TradeLens, Maersk is optimistic that this blockchain-based platform is able to reduce by 20.0 percent the cost of transporting a container.

The national single window initiative of many of countries could be strengthened by the use of blockchain (ledger) technology. The distributed ledger technology has the potential to improve customs procedures by eliminating redundancy, speeding up customs clearance, reducing fraud, ensuring transparency, and improving coordination between and among the various stakeholders involved in cross-border trade (WTO 2018). In addition, the use of smart contracts makes it possible to automate certain processes, such as the payment of duties (Ganne 2018).

Additive manufacturing or 3D printing skips the assembly of complex inputs from parts and components imported from companies along the value chain by manufacturing the complex input as one piece and, thereby, reducing the number of production stages. This accelerates simplification of value chains in countries adopting the technology. 3D Printing has also given rise to "speedfactories" that does decentralized production in locations closer to end-users. Final products may be produced locally, driving down import or export costs.

Real-time translation and e-commerce platforms smoothen global trade and investment by removing communication barriers.

Global trade in the 1990s is still hampered by communication barriers; countries sharing a common language tend to have more trade (WTO 2018; Egger and Lassman 2012; Isphording and Otten 2013). The development of technologies (e.g., Skype Translator) have allowed language translation to occur not only outside of printed text but also during real time conversations. This development offers many opportunities to companies and businesses looking to expand their markets and customers. It also becomes possible for GVCs to expand to countries outside the shared language network. Finally, investment promotion and negotiations between companies could happen smoothly using these technologies.

The cost of translation is greatly reduced in e-commerce platforms because these platforms can operate in any language at the same time. Because these platforms utilize a template for the transactions between multiple buyers and sellers, one-on-one transactions are essentially minimized. Also, because buyers using their own language are able to look for sellers of any good or service regardless of location, the need for language translation is also minimized. Through e-commerce platforms, MSMEs are able to conduct international businesses without paying for international translation services.

#### 3. Worsening Inequality

There is little dispute over the reality of rising incomes over the last century worldwide, and the concomitant gains in various measures of health and well-being over the vast majority of the human population. What is deeply contested though is the fairness and inclusiveness of humanity's progress. Inequality of income and living standards has been a fixture of economic life since antiquity, but recently it has become a central concern in the economic agenda of many countries, including the wealthiest. In the United States, the working class had apparently felt more alienated from the economic mainstream after the financial crisis, leading then President Obama to affirm: "...the defining challenge of our time [is] making sure our economy works for every working American".<sup>2</sup>

Certainly, growing unease over inequality stoked interest in *Capital in the 21st Century* (Piketty, 2013), making it a worldwide bestseller. Its evocative title alludes to a central thesis of the book, that the undeniable benefits of capitalism come with a dark side. The ideal of global markets bringing prosperity to all has dissolved in the face of worsening global inequality.

Care must be taken though drawing conclusions about inequality trends, as there is no one settled measure of inequality. Conceptually, one may decompose global inequality into: two components: i) disparities in average incomes across nations; and ii) disparities between the national average and individual incomes within a nation. The following sub-section examines evidence in this regard.

#### 3.1 Inequality Trends

Disparities of average per capita income across countries has been declining over the last half-century.

The neoclassical growth model of Solow predicted convergence of per capita output across countries – a prediction that seemed to materialize with the rapid catch-up of some large developing economies in the latter part of the 20<sup>th</sup> century. Inequality between inter-country per capita incomes, when population-weighted, has been on the decline since the 1980s and 1990s; (Milanovic 2016); rapid growth in China and India have been responsible for the bulk of income convergence. There is however some evidence that pace of catch-up is faltering since the global financial crisis (Johnson and Papageorgiu, forthcoming).

Across regions of the world and within large economies, income inequality has been worsening, as the richer income groups capture the bulk of the gains from economic growth.

\_

<sup>&</sup>lt;sup>2</sup> https://www.politico.com/story/2013/12/obama-income-inequality-100662 (accessed September 5, 2019)

Within-country inequality is a different matter. Gini coefficients have been rising for a broad set of countries. In 2016, the top ten percent of households in terms of income captured over 40 percent of national income in the case of China, India, Russia, and US-Canada; the share of the top ten was 35 percent or below in all these regions in 1980. The share of the bottom 50 percent worldwide has remained stagnant at around 9 percent. Furthermore, the benefits of growth – the engine of cross-country convergence – tends to be captured by the better-off (Figure 4).

China Europe India Russia US-Canada World 100% 80% 43 48 57 66 67 60% 117 40% 43 38 31 23 20% 32 14 13 12 11 7 0% -24 -20% ■ Bottom 50% ■ Middle 40% ■ Top 10%

Figure 4: Share of global growth captured by income groups, 1980 - 2016

Source: Alvaredo et al (2018).

The share of economic growth captured by the top 10 percent worldwide is 57 percent, whereas the bottom 50 percent of the world population received only 12 percent. The poorest groups have received similar relative gains in China and India, though the top 10 percent have captured more in India, while in China it is the middle income group that has captured more. The lower income groups have hardly shared at all in thirty years of economic growth, whereas in Russia it is actually the case that the rich are richer and the poor are poorer (Alvaredo et al 2018).

In the case of the Philippines, income inequality has actually been improving, as the share of the top decile has been fallen from 2000 to 2015, while the income shares of the bottom eight have increased (Figure 5). The Gini ratio has fallen, though only slowly, from 2009 to 2015; it now stands at 0.44 (PSA, 2019). In a ranking of 43 countries as of 2016 (OECD 2019), this would qualify the Philippines in the bottom ten, which includes USA (0.39), Mexico (0.46), Brazil, (0.47), India (0.50), and China (0.51).

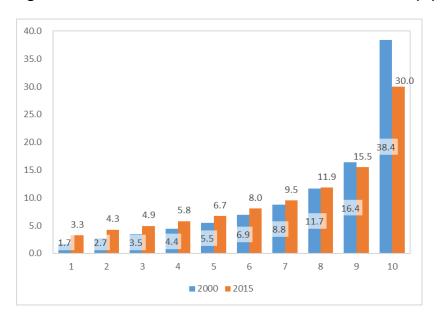


Figure 5: Share of income deciles in total household income (%)

#### 3.2 Drivers of Income Inequality

Available literature on drivers of income inequality has been reviewed (Dabla-Norris et al 2015) to identify several factors that could be driving income inequality across countries. Among the key factors are the following:

- Globalization in trade, capital, and finance: firms in rich countries are able to invest abroad where low-skilled labor is cheaper, to the disadvantage of low-skilled labor within the country. Low-skilled, outward foreign direct investment (FDI) of a rich country may be relatively high-skilled, inward FDI of an emerging economy, thereby worsening inequality in the latter as well. The increased flow of capital across borders, whether for direct investment or in the form of financial assets, may have increased income inequality in both rich countries and emerging economies.
- *Technological change*. New technologies, especially in ICT, has led to enormous gains in productivity. However, it has also driven up the skill premium, exacerbating labor income inequality. New technologies will tend to raise demand for capital and complementary, high-skilled labor, while removing low-skilled labor by automation. Technological change are the biggest contributor to inequality in OECD countries.
- Changes in labor market institutions. As with globalization and new technology, labor
  market flexibility has been integral to increased economic efficiency, reallocation of
  resource, and faster economic growth. However past policies that strongly regulate
  labor markets may have also been protective of wages of low-skilled workers. The net
  effect is nonetheless ambiguous, as there is a contrary effect of dis-incentivizing job
  generation for the bottom income group.
- Financial deepening: greater sophistication in mobilizing a country's savings (measured say by relative share of financial sectors in the economy) may tend to boost top incomes more than bottom incomes, particularly in early phase of economic development. Households already with higher incomes and assets have disproportionately greater access to finance, owing to higher participation in formal markets, high transaction cost in dealing with diverse households at the margin, and better levels of education, further increasing the skills premium.

Dabla-Norris et al (2015) also examine the relative importance of these drivers using cross-country regressions. Their analysis found that rising income inequality over the last thirty years can mostly be explained by deregulation of labor markets, financial deepening, and technological progress. Financial openness (rather than other forms of globalization) has played a reinforcing, though relatively minor role. Labor market flexibility has played a greater role in emerging market economies, followed by new technologies; whereas the rankings of the top two are reversed in OECD. In the latter especially, accelerating technological change and economic restructuring, does seem to largely bypass the lower income earners.

The rise of new global tech giants, and the survival of older giants that have maintained leveraged new technologies to consolidate their market shares, does little to ease the common person's sense of from the economic mainstream. The digital divide will apparently widen further, as tradition-bound firms and workers are left behind in Industry 4.0, whereas early innovators leap forward.

In case of the Philippines, the decline in inequality has been associated with a decline in poverty as well between 2012 and 2015, the national poverty rate fell by 1.2 percentage points per year, reaching 21.6 percent in 2015. The pace of decline is however only half of that or 0.6 percentage points per year over the period 2006 - 2015. Over the latter period, using poverty incidence based on the international standards, poverty has fallen by 0.9 percentage points per year. Increase in wage income, and the shift of workers out of agriculture, contributed two-thirds of the poverty decline. Even low-end service and industry jobs pay better than agriculture; hence, the transition out of agriculture has been significantly pro-poor. Transfers have contributed another one-half to poverty decline; the contribution of transfers from government (namely the 4Ps program) alone accounted for a quarter, while private transfers (both from foreign and domestic sources) account for the rest. Note that the shares sum up to more than 100 percent; this is to compensate for the -15 percent contribution of entrepreneurial incomes, mainly from farming and low-value services, which have fallen in real terms over the period (World Bank 2018).

#### 4. Threats to Provision of Global Public Goods

#### 4.1 Why Global Public Goods Matter

Many everyday issues confronted by households, businesses, and governments transcend national boundaries, extend across generations, and go beyond any one socio-economic group. Some of these challenges include those related to combatting the risks from communicable diseases, climate change, and terrorism that directly affect the well-being of populations. It may also include the creation and maintenance of transnational infrastructures, such as cross-border communication and transportation networks, that allow local economic activities to prosper. Despite the importance of these global public goods (GPGs), its provision remains severely underfunded. While technology has the potential to facilitate a common understanding of the roles of GPGs, the rise of misinformation from fake news and post-truth discourses showcases the difficulty of arriving at an international consensus on GPGs.

GPGs are not new concepts. Their publicness may arise from the classical notion that GPGs are non-excludable, i.e., it is impossible or very costly to exclude anyone from consuming it, and non-rival, i.e., its consumption by an individual does not limit others from benefiting from it (Samuelson 1954). Beyond this classical ideation, however, GPGs like many other public goods involve publicness in provision, i.e., the production of GPGs are not confined to

governments but instead involve a large number of different actors, which often require publicness in decision-making, i.e., the process by which political decisions on GPGs are arrived at necessitate the participation of different stakeholders with governments being just part (Kaul, et. al. 2016; Kaul 2019). What sets GPGs apart from national and local public goods is the global reach of GPGs, which ignores geographical, temporal, sectoral and agent-specific boundaries (Kaul 2019).

Recent world developments have made global public goods more important than ever.

The steady decline in trans-national transportation and communication costs that allowed globalization to so far prosper, and the rapid changes in technology that revolutionize how we do business have highlighted the critical roles played by GPGs (c.f. Nordhaus 2006; Kaul 2019). On the one hand, these factors facilitated – and even necessitated – the creation of new GPGs, such as rules of engagement in global trade, transportation, and communication, as well research and other knowledge-products that benefit humanity. On the other hand, however, globalization and technology have contributed to the spread of negative GPGs, i.e., global public bads. While trade and commerce has greatly improved human welfare for instance, greater international trade may contribute to the globalization of pollution (c.f. Copeland and Taylor, 2004). Fake news and untruths are now easier to propagate with the ubiquity of the internet and social media, which may otherwise have been easier to manage with traditional mass media. Cheaper transportation costs have made international travel more accessible, which may facilitate the spread of communicable diseases.

That being said, valuing the stock and the contribution of global public goods and bads to the world economy is at best complicated although there had been several attempts to compile these statistics (e.g. Kenny, et. al. 2018; Birdsall and Diofasi 2015). For instance, Juffe-Bignoli, et. al. (2016) estimated that it costs at least USD 6.5 million per year to develop and maintain global biodiversity and conservation knowledge products. Invasive insects that spread diseases, destroy crops and damage properties cost a minimum of USD 70 million per year, a tenth of which may be attributed to health costs (Bradshaw, et. al. 2016). In the US, Facebook is estimated to have contributed 0.05 to 0.11 percentage points per year to the country's GDP growth since 2003 (Brynjolfsson, et. al. 2019). In climate science, experts peg the social cost of carbon that will likely limit transient global temperature increase to less than 2°C to be at USD 40 per ton of CO<sub>2</sub> (Rogelj, et. al. 2013).

Despite its importance, global public goods remain underprovided.

Standard economic theory predicts that GPGs, like other public goods, will be underprovided as a consequence of its non-excludability feature however important GPGs may be. Some potential beneficiaries may free-ride on GPGs provided by other actors. But free-riding may not be the main issue surrounding the under-provision of GPGs. Indeed, the biggest challenge is in ensuring coordination and cooperation among the many stakeholders of GPGs, which may fail for a number of different reasons other than free-riding, including organizational frictions, information asymmetry, fairness concerns, and conflicting global norms (Kaul, et. al. 2016).

Take the case of the United Nations (UN) System for example. The UN was founded in 1945 "[t]o maintain international peace and security", and "[t]o achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character", among others (United Nations 1945, p. 9). Under the UN System are different affiliated programs, funds, and specialized agencies that coordinates international efforts on particular

issues such as environment, health, trade, labor, poverty, hunger and malnutrition, financial systems, and other important issues that touch on human lives.

With such prominent role played by the UN System in global socio-economic, humanitarian, and security affairs, one might expect substantial counterpart funding. As shown in Figure 5, however, the revenues of the UN System, including both mandatory and voluntary contributions from state and non-state actors, totaled to just less than 0.1 percent of the world GDP in the past few years (Figure 6). Moreover, its GPG-type expenditures, such as for peacekeeping operations, and for normative, treaty-related and knowledge creation activities have remained largely unchanged on the aggregate in the recent past (Figure 7).

It is in the interest of the Philippines to promote greater provision of global public goods.

It is needless to say that it is in the best interest of the Philippines to promote the greater provision of GPGs. First, many GPGs cannot be provided by any one country alone. This includes, for example, global security and the control of vaccine-preventable diseases, which require some minimum level of participation among different actors for the GPG to actually generate benefits. Second, the cost of providing GPGs may be prohibitive for countries to take on individually, but may be more financially viable when shared. In 2017, the Philippines spent close to PhP 200 billion (ca. USD 4 billion) for climate change adaptation and mitigation measures (Department of Budget and Management, 2019), which is just a fraction compared to the estimated 0.8-1.3 percent of annual world GDP in carbon taxes required to meet the Paris Agreement temperature target (Rogelj, et. al. 2013). Third, participation in GPG provision regardless whether unilaterally or multilaterally often produce dividends beyond those initially invested. For instance, vector control measures that minimize the transmission of communicable diseases locally may indirectly limit the spread of diseases outside the immediate scope of its intended beneficiaries.

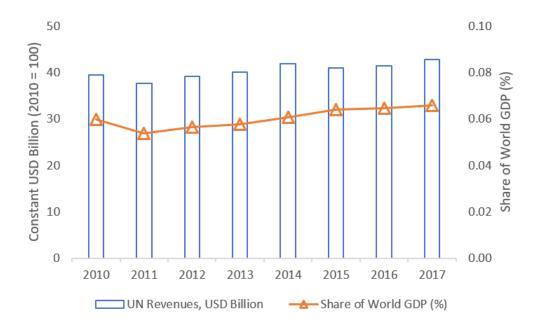


Figure 6. United Nations System Revenues, 2010-2017

Source: United Nations System Chief Executives Board for Coordination. Accessed from https://www.unsceb.org/content/FS-F00-04 on 14 June 2019.

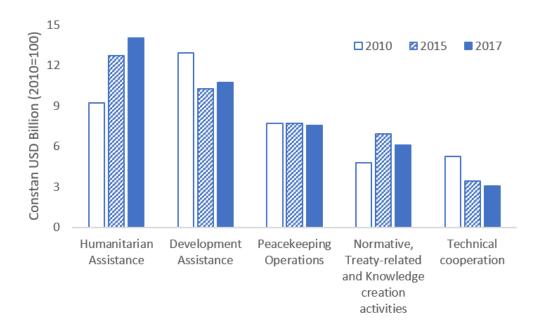


Figure 7: United Nations Expenditures by Category, 2010-2017

Source: United Nations System Chief Executives Board for Coordination. Accessed from <a href="https://www.unsceb.org/content/FS-F00-04">https://www.unsceb.org/content/FS-F00-04</a> on 14 June 2019.

#### 4.2 Case in point: Multilateral Trading System as GPG

Expansion of global trade and GVCs have been greatly facilitated by international trade and economic cooperation agreements.

The 1990s to the early 2000s saw the successful conclusion of the Uruguay Round (1986-1994) and the establishment in 1995 of the WTO. These facilitated the reduction of tariffs, removal of trade barriers, and the opening up of international business transactions. Several countries shifted away from import substitution and adopted an export-led growth strategy instead.

This same period also saw countries form bilateral partnerships and regional trading blocs [e.g., North American Free Trade Agreement (NAFTA), the European Union (EU), or the Asia-Pacific Economic Co-operation (APEC)] (Buckley 2003). The WTO together with other multilateral organizations, such as the IMF and the World Bank also provided coherence to international policy-making, which resulted to an environment conducive for trade liberalization and globalization (WTO 2008).

The global economy characterized by an integration of market economies is facing fragmentation.

Disenchantment with globalization has led many large countries to turn inward. Open engagement with the world is being seen by many exposing a society to unnecessary risks, endangering a country's economic standing, military security, and even cultural integrity and personal safety. Even as global hegemony fragments along multiple polies, the United States wages a trade war, has pulled out of international cooperation schemes such as Trans-Pacific Partnership and the Paris Agreement, and has tightened immigration controls.

The strategic rivalry (trade war) between China and the US is expected to affect every part of the global economy through a mixture of cooperation and competition strategies countries would employ (Spence 2018). In March 2018, US imposed additional tariffs on goods imported from China to restrict Chinese investment entering the United States. This is in an attempt to push China to end "unfair" trade practices. In retaliation, Beijing has imposed tariffs on the same value of imports from the US.<sup>3</sup> Recent developments show that further actions from both sides are to be expected. Other countries have also reacted to the trade war by imposing their own tariffs and protecting their own industries.

ABN AMRO Bank identified three channels through which the trade war will affect the region (van Dijkhuizen, Diviney, and Schuiling 2018). First, there will be an initial loss in business confidence brought about by an increase in uncertainty. Second, there will be a decline in the demand for US and Chinese exports. Lastly, a reduction of demand for inputs produced in value chains located in the region will follow. The initial impact of the trade war can already be felt. According to the studies of the IMF (2018), ADB (Abiad et al 2018), and ABN AMRO (van Dijkhuizen, Diviney, and Schuiling 2018), the trade war has significantly dampened global and regional growth over the medium term. Growth projections for the ASEAN have been revised downward by ADB and IMF (Abiad et al 2018). The uncertain global environment has made investors enter into a 'wait-and-see' mode, so to speak.

Nonetheless, the trade war may also present an opportunity for countries in the region. For instance, Abiad et al (2018) presents the possibility of countries in ASEAN benefiting from the trade war through trade redirection. Abiad et al (2018) shows that Viet Nam (+2.14%), Malaysia (+0.46%), Chinese Taipei (+0.42%), and Thailand (+0.22%) may benefit from trade redirection because they produce and export goods that compete with products from economies affected by the tariffs.

For the Philippines, Mariasingham (2019) using the ADB Multi-Regional Input-Output table finds that the Philippines stands to gain from the current trade conflict through the expansion of the electronics industry, one of the country's primary exports (Figure 8). The services sector will also benefit, albeit slightly. In addition, the results also show that further escalation of the trade war will be detrimental to the business services sector of the country.

\_

<sup>&</sup>lt;sup>3</sup> Beijing imposed USD 3.00 Billion in tariffs in retaliation to the USD 3.00 Billion in tariffs imposed by the US on steel and aluminum imports

% to sector GVA Impact on Philippine Major Sectors 0.9 ■ Direct and Indirect ■ Trade Redirection Net effect 0.6 0.20 0.3 0.05 0.06 0.05 0.02 0.03 0.0 -0.3Current Bilateral Worse-Case Current Bilateral Current Bilateral Escalation Escalation Escalation Agriculture Manufacturing Services

Figure 8. Impact of the Trade War on the Philippines, by Sector

Source: Mariasingham and Feliciano (2019)

Another source of uncertainty in the current global environment is the rise in protectionist and populist policies in some countries, which have alienated their partners and allies.

Rising protectionism in the US has subverted the institutions of global trade, provoked trade wars and abandoned negotiations for regional agreements. This is despite the US having in the past demonstrated the value of free and open global trade relations, as evidenced by its vigorous push for the successive rounds of the GATT, support of the establishment of the WTO, and advocacy to developing countries to open their economies (i.e., Washington Consensus).

Protectionism has also become prevalent in Europe. Since the Global Financial Crisis in 2008, there has been a rising number of protectionist policies restricting product importation through import licenses for various products, imposing higher tariffs, and other measures imposed on importing parties. A total of 31 EU trade partners introduced 201 such trade barriers whilst only 16 of them were withdrawn. Such barriers would only result in market inefficiency and further reduce the belief in the EU as one market. Other countries in the EU (Italy, Netherlands, and France) have also seen the rise of populist leaders and/or parties that also attack globalization.

The multilateral trading system is also under threat

The unique strength of WTO is its reliance on dispute settlement mechanism, in contrast to sheer moral suasion backing up other trade agreements. However, this "jewel" of the WTO is now threatened with paralysis, as the US has been blocking the appointment of new judges to the WTO dispute settlement mechanism (Yong 2018). Amid this stall, countries are pushing for piecemeal and sectoral accords, such as e-commerce and investment. While it may be constructive to push for liberalization in any way and anywhere we can, which may even be seen as a positive for groups of like-minded countries, it underlines the sense that the WTO's broader negotiating agenda is mired in disagreement.

Despite protectionist and populist policies on the rise, the support for a liberalized trading environment and the multilateral trading system (MTS) is still very strong. This can be seen in Asian governments continuing to support the MTS (see Chairman's Statement in APEC). The continued cooperation towards the ratification of the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), despite departure of the US, is another manifestation of how regional blocs such as ASEAN will react to the uncertainty brought about by these developments.

### 5. Building Trust and Social Cohesion

#### 5.1 The Significance of Social Cohesion and Trust

Implementation of reforms is easier in socially-cohesive societies.

Social cohesion, according to OECD (2011), involves three elements, namely, social inclusion (equality in participation on economic, social, and political arena), social mobility (equality of opportunity), and social capital (trust of people in institutions). While all three elements are equally important in creating a socially-cohesive society, there is a need to focus on trust given the significant advancements in information technology and the increasing complexity of platforms that can be harnessed as tools to either polarize or unite societies. Trust is essential to the implementation of reforms that are needed to address the challenges brought about by globalization and of policies/programs aimed at achieving the sustainable development goals and the citizens' aspirations (*AmBisyon Natin* 2040).

Why are trust and social cohesion important to reforms? Ritzen, Easterly and Woolcock (2000) contend that, personal ethics aside, both good and bad politicians per se are limited by social constraints to devise and implement the necessary reforms, especially in the face of major socioeconomic upheaval. A case in point is the stark contrast between the responses of South Korea and Indonesia's citizens during the Asian Financial Crisis, which to some extent illustrate how recovery from shocks can be sluggish for less cohesive societies. Without the citizen's trust that their short-run sacrifices will have long-run payoffs, economic reforms are likely to be challenged. Without reforms to address important issues like increasing inequality, social conflicts will arise. In turn, social conflicts will diminish productivity by delaying adjustments in fiscal policies and key relative prices, by generating uncertainties in the economic environment, and by diverting activities from the productive sphere to the redistributive one (Rodrik 1999).

Societies high in trust and cohesion show better economic performance.

High-trust and socially cohesive societies have strong economic performance (Whiteley 2000; La Porta et al 1997; Knack and Keefer 1997), are more likely to perform better in the face of external shocks (Rodrik 1999), and are more likely to pursue pro-poor economic growth strategies (Ritzen and Woolcock 2000). Indeed, a simple correlation (Figure 9) indicates that high-trust societies have high GDP per capita. The Philippines, with a GDP per capita of around \$6000, has the lowest share of people that agree that most people can be trusted. The country is in the same league as some African countries such as Ghana and Zimbabwe and some Latin American nations such as Ecuador and Colombia.

How exactly does trust translate to economic performance? In a widely-cited paper, Arrow (1972) has aptly emphasized that "Virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time. It can be plausibly argued that much of the economic backwardness in the world can be explained by the lack of mutual confidence." (Arrow 1972, p. 357) Where there is trust, less resources are expended in the enforcement of contracts, the prevention of properties from being expropriated, and the intermediation of distributional conflicts. Where there is trust, there are stronger incentives for innovation and the accumulation of physical and human capital. Where there is trust, good governance follows. At the macro level, government officials in high trust societies are more likely to honor policy pronouncements on interest rate, exchange rate, inflation, and tax reforms, among others, and this sends signals to local and foreign investors to adopt a longer term planning horizon (Knack and Keefer 1997).

### 5.2 Key Factors in Social Cohesion and Norms of Trust

Globalization, once seen as a force to strengthen social cohesion, has inadvertently contributed to erosion of trust.

In the past, globalization has been argued to enhance trust as a result of economies coming together for cooperation and integration and it brings with it opportunities, freedoms, and experiences that are otherwise not available in closed economies (Caplan and Cowen 2004; Polillo 2012). However, globalization has also been seen as an uneven process that brings with it unequal distribution of wealth and power, which leads to disenchantment and pessimism (Kaya and Karakoc 2012; Guillen 2001), and erosion of trust in institutions. The sense of legitimacy, once enjoyed by institutions of democracy and international cooperation, is being increasingly undermined.

The landscape of media platforms has substantially evolved, together with public trust in institutions.

In the earlier eras of democracy, there were few media channels and gatekeeping of information has been easy (Bennet and Livingston 2017). Today, social media platforms serve as an alternative information sources that have contributed to the proliferation of mis-information, dis-information, and mal-information, the last two of which capitalize on the existing narratives of populism, discontent, racism, nationalism, and anti-establishment sentiments to sharpen the sociopolitical divide. It has become the vehicle of propaganda and a tool for modern information-age warfare with the intent to influence social outcomes such as what is claimed to happen in the US 2016 election (Prier 2017). In the Philippines, disinformation campaign is also claimed to be part of the political campaigns at the local and national levels (Ong and Cabanes 2018). Ong and Cabanes (2018) contribute to the increasing literature on disinformation by analyzing how the architects of networked disinformation adopted the clickbait marketing strategies in social media platforms and turned it into a tool to propagate fake news.

Our World Country by country: Trust vs. GDP per capita in Data Shown is the share of people agreeing with the statement "most people can be trusted". For each country the latest available data is shown. Norwity 70% 70% Share of people agreeing with the statement "most people can be trusted" Netherlands e China 60% 60% 50% 50% Hong Kong • Canada 40% 40% @ United State 30% 30% 20% e-Chile 10% Colombia eTrinidad and Tobago 0% 0% 0\$ 30,000\$ 40,000\$ 50,000\$ 60,000\$ 70,000\$ GDP per capita in 2014 (adjusted for price differences between countries) Data source: World Value Survey for data on trust and Penn World Table for data on GDP per capita Licensed under CC-BY-SA This visualization is available at OurWorldinData.org. There you find the raw data and more visualizations on this topic. by the author Max Rose

Figure 9: Scatterplot of GDP per capita and indicator of trust

Source: Our World in Data (https://ourworldindata.org, accessed June 15, 2019)

At the center of this networked disinformation is the ecosystem of intentional and unwitting human agents.

On its own, a disinformation campaign will never flourish (Prier 2017; Wardle and Derakhshan 2017). The message needs amplification through bots that can manipulate majority-oriented platform algorithms to gain vast visibility and can create conformity among human agents who would then further distribute their messages (Wardle and Derakhshan 2017, p. 37). This process results in trending messages, which are legitimized once picked-up and reported by the traditional media. While this set-up exploits the advances in information technology to distribute messages in huge volume and in high frequency, it also banks on the element of trust of human agents in their network of family, peers, friends, and like-minded people. As Stray (2017) aptly puts it, "Receiving a message via multiple modes and from multiple sources

increases the message's perceived credibility, especially if a disseminating source is one with which an audience member identifies".<sup>4</sup>

Indeed, the growth of social media platforms has fully shifted the people's trust from a top-down orientation to a horizontal one in favor of peers or experts (Edelman 2018). Who do people trust? The 2019 Edelman Trust Barometer reports that trust inequality has the highest gap in 2019 at a 16-point gap between the more trusting informed public and the more skeptical mass population. The same report shows that people turn to their employers as credible sources of information and that employers outrank the trust level in NGOS, business, the government and media (Figure 10). This emphasizes the important roles of employers in restoring trust/social capital. This also emphasizes the important roles of CEOs of tech companies and alternative media channels to safeguard their platforms from being exploited to sow divisiveness.

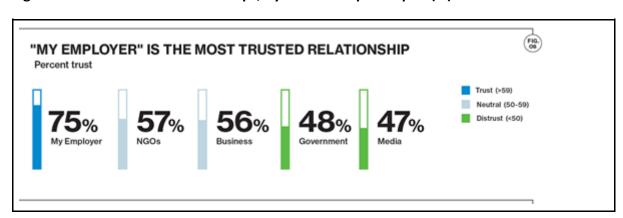


Figure 10. Most trusted relationships, by shares in opinion poll (%)

Source: Edelman (2018)

Given the power and influence of social media platforms to shape sociopolitical narratives and outcomes, it is vital to educate the public on how exactly these alternative media channels are used to manipulate public opinion and amplify disinformation. In addition, it is important to understand incentives why people would knowingly participate and cooperate in the disinformation campaign. Doing so can identify the potential role of traditional media, technology companies, CSOs, and the government to stop the proliferation of disinformation, protect people from unwittingly participating in the production of disinformation, and inform regulation to reduce the cases of willing participants.

Technology, with support of government, has great potential to foster trust through more transparent and faster public transactions.

Enhanced transparency and accountability are likely to result in better public-private collaboration and foreign direct investments that can translate to innovative solutions in doing

\_

<sup>&</sup>lt;sup>4</sup> https://medium.com/tow-center/defense-against-the-dark-arts-networked-propaganda-and-counter-propaganda-deb7145aa76a (accessed September 5, 2019)

business. Blockchain technology, mentioned earlier as a factor towards transforming global value chains, holds great potential for facilitating transactions in general, including in the public sector, by increasing efficiency and transparency, and reducing fraud, corruption, and transaction costs.

In the past, transactions use intermediaries to maintain transaction records. Trust is at the center of this process where parties to the engagement rely on intermediaries to accurately keep transaction records. With the advent of Blockchain technology, the need for intermediaries is eliminated because stakeholders are furnished system-generated copies of transaction records, which are considered original and can no longer be modified once approved by all parties. While Blockchain was originally used in cryptocurrencies, its application is now being explored in shared data services, smart contracts applications, and identity management (American Council for Technology-Industry Advisory Council 2019; Mcquinn and Castro 2019; Berryhill et al 2018).

#### 6. Recommendations for The Philippines

#### 6.1 Economic Restructuring

There is a need to strengthen the digital trade of services.

One way to focus policy is by identifying service sectors where weak national regulation can undermine the benefits of liberalization, particularly by remedying regulatory inadequacies in these service sectors.

Likewise, disruptions of mega-value chains will need to be addressed.

The new patterns of GVCs contribute to the way the global economy will look in the future. The country needs to pay attention to the new patterns that have emerged; re-evaluating the strategies solely focusing on upgrading to participate in complex GVCs as simple GVCs may be another strategy that needs to be explored. Other actions along the following lines:

- Reduce unit labor costs, improve logistics and connectivity, and provide an efficient process for meeting international requirements and standards;
- Take advantage of the possible trade diversion by attracting businesses and FDI to locate in the Philippines;
- Equip domestic industries to participate in evolving GVCs through innovation support, reskilling, and retooling of employees, strengthening business matching and international partnerships; and,
- Diversify export portfolio covering complex and simple GVCs to manage global risks.

The country should continue to strengthen international relations with traditional partners and pursue new partnerships with emerging economies.

Even as the global market order continues to fragment, pursuit of economic cooperation remains essential, but the country's engagement must recognize the evolving regional and global architecture. The following measures will contribute to this engagement:

- Affirming commitment to the MTS and cooperate on addressing issues of data security, data ownership, and intellectual property;
- Studying the possibility of participating in mega-trade deals; and,

• Pursuing new partnerships with countries within and outside the region to hedge risks.

The disruptions brought about by FIRe are an opportunity to leverage new technologies to improve trade and investment.

Levering new technologies requires that technical and regulatory challenges to the adoption of new technologies in government processes and procedures be addressed. Likewise, transport and other logistics services should remain competitive; and investment, both public and private, in basic infrastructure should mobilized, particularly those related to ICT.

The basic infrastructure must be made available in order for FIRe technologies to be efficiently used.

The potential of these applications of FIRe to trade in goods and services and in the flow of capital and investment would not be maximized without addressing challenges to the use of digital technologies. Regulatory uncertainties, including liability issues and the lack of interoperability of existing platforms, remain obstacles to the utilization and application of FIRe technologies.

#### 6.2 Worsening Inequality

Alvaredo et al (2018) warn us that "where rising inequality is not properly addressed, it leads to all manner of political and social catastrophes" (Alvaredo et al 2018, p. 22). It is suspected that the on-going assault on the political, scientific, and media "establishment", led by populists and anti-globalist leaders, but winning wide grassroots support, may be an early warning of these "political and social catastrophes". The Philippines, having bucked the worldwide trend of rising inequality, may be seen as model for combining rapid growth and inequality reduction, however modestly. The country will do well to maintain its exemplary performance by undertaking the following:

Implement policies that promote basic and higher education.

Education, especially at higher levels, largely determines the skill premium. However, for the poor, reaching and paying for education at this level is arduous and unaffordable. Public support for access to education of the poor is deemed essential to address inequality trends stemming from technological change. As well, support as well can be directed towards other post-secondary education, such as technical and vocational education (TVET), as well as apprenticeship programs.

In developing countries, improving access to and performance in basic education remains an essential prerequisite to higher educational attainment. In the Philippines, even so basic an investment as health and nutrition of women and children is essential to sustained human capital formation; in 2015, under-5 children in the country posted an alarmingly high rate of stunting (33.5 percent), which cannot bode well for educational performance and labor market competencies of the affected cohort (Briones et al 2017).

*Invest in quality education to upgrade the workforce with 21st century skills.* 

Investment in basic education should be followed through with upgrading of secondary and higher education towards 21<sup>st</sup> century skills. In Southeast Asia, an estimated 56 percent of employment is at risk of automation; in the Philippines, the most vulnerable are the 2.2 million

workers in trade services. Moreover, in ASEAN-5, women are disproportionately employed in these vulnerable occupations. Aside from teaching specific skills for a digital age, a more important thrust is to mainstream "learning to learn" in educational systems, i.e. producing students who embrace lifelong learning, continuous training, and are adept in deploying ICT in upgrading their skill sets (Dadios et al 2018).

Craft labor market policies to strike a balance between labor protection and labor market flexibility.

There is some evidence to suggest that labor unions, enjoying protections under law, have been responsible for improved wages and working conditions of workers. A similar effect might be achieved with minimum wage policy. However excessive controls, and a distortionary minimum wage, can end up quashing employment for low-skilled workers, worsening poverty and likely also income inequality. That minimum wages are already at this level appears to be the case for the Philippines (Paqueo, Orbeta, and Lanzona 2016). Careful crafting of policies to balance flexibility with protection must be maintained.

Labor market programs that support job search and skill matching enhance labor market flexibility; so do policies that address dualism in the labor market. "Informal workers need to have the necessary legal, financial, and educational means to access formal sector employment...Policies to reduce tax, financial, and regulatory constraints can expand formal sectoral employment by reducing the incentives for firms to operate informally, both by increasing the benefits of participating in the formal sector and reducing the costs of doing so (OECD, 2012, p.12)."

Implement reforms and promote innovations towards financial inclusion.

Financial deepening should be accompanied by access financial services for lower income groups, the marginalized sectors, and those in dependent on informal economy. This will help address the negative contribution of entrepreneurial incomes on poverty reduction observed in recent years. However, policy reform entails another balancing act as dismantling of too many safeguards too soon can endanger financial stability. Governments must continue to protect lender and borrower rights; remove or streamline onerous documentary requirements; confer regulatory recognition for technological innovations in financial services; and promote the flow of information about borrowers and creditors. A multi-stakeholder strategy known as the National Strategy for Financial Inclusion (NSFI) of the Philippines was launched in 2017 that includes these key principles of financial inclusion. NSFI identifies Bangko Sentral ng Pilipinas (BSP) as lead agency in the national strategy; what remains to be implemented is the action program already stated in the document, i.e.:

- Memorandum of Understanding (MOU) to be signed by all implementing agencies;
- Cascading of the strategy to medium-term work plans of participating agencies;
- Sharing of relevant information to enhance policymaking and implementation;
- Putting in place M&E system for financial inclusion down to the agency level;
- Implementing a communication plan.

Strengthen progressivity and targeting of social protection systems.

Social protection systems, which subsumes tax-transfer schemes, will reduce inequality when the tax regime is progressive and transfers are targeted. In many advanced countries though the existing schemes have failed to counter rising inequality (Dabla-Norris et al 2015). Certain

types of transfers though tend to be regressive, e.g. social security, consumption taxes, even real estate taxes; progressivity on the taxation side can be increased by removing tax exemptions/expenditures that tend to benefit the better-off (OECD 2012).

In the Philippines, the first package of tax reforms under the Duterte administration was found to be regressive on the whole, hence the reform package itself incorporated compensatory, targeted transfers, which partially alleviated the regressivity (Manasan 2018). On the transfers side, the targeted conditional transfer scheme has been empirically shown to contribute to poverty reduction, and this has been strengthened by law (RA 11310); also commendable is the effective termination of the subsidized rice program National Food Authority (NFA) which is a grossly ineffective transfer scheme in terms of targeting the poor. On the other hand, the government adopted some transfer policies that are poorly targeted, blunting their effectiveness in reducing inequality; these include free tertiary education in public schools, and the free irrigation law.

#### 6.3 Global Public Goods

The provision of global public goods is fraught with a lot of challenges that limit different stakeholders' ability to coordinate and cooperate towards some global goal. That said, aligning local policies with that of international mechanisms facilitating GPG provision may be an important opportunity to realize national and local development goals and aspirations.

Leverage regional and international platforms to enhance the delivery of local services.

Existing GPGs, including on multilateral trading systems (e.g., GATT-WTO), may be employed to facilitate economic growth. For example, aligning local policies with international standards may allow local businesses to tap into different global markets. Acceding to international agreements may also provide certain guarantees, preferential windows, and development assistance, which the government may utilize to provide local goods and services.

Support international action to increase the provision of global public goods, especially those that are particularly beneficial to the country.

The combined global and public natures of GPGs suggest that its provision will often be below what is optimally desired. This is particularly true in a world where there is no international government to coordinate horizontal state actions, and to impose sanctions on those that renege on international commitments. That said, the same global-ness and public-ness of GPGs imply that coordination and cooperation among the different stakeholders is key in providing GPGs. For the Philippines, for instance, unilaterally providing public goods with global benefits, e.g., communicable disease control, and counter-terrorism measures, ultimately impacts the well-being of the local population. However, these benefits may be had more cost-effectively when provisions are coordinated globally. It is important to underscore though that international agreements on the provision of GPGs must be mutually beneficial, fair, transparent, and respect diversity among all cooperating parties.

Strengthen national and local capacity to harness benefits from global public goods, and to minimize risks from global public bads.

Local stakeholders need to be capacitated in order to fully harness the benefits from GPGs. This requires, for instance, training and re-tooling of workers and entrepreneurs on existing

regional and global trade platforms. Basic education curricula may need to be revisited for children to be aware of the importance and issues surrounding GPGs, and the roles played by different stakeholders. Government actors need to be abreast with international conventions and best practices, including preferential windows for developing countries like the Philippines, in order to effectively adapt these measures locally.

Sustain national and local initiatives that foster local provision of global public goods.

While not necessarily ideal, unilateral provision of public goods with global features may still be beneficial. For instance, vaccination, disaster risk reduction and management, and climate change mitigation, which all have large potential spillover benefits, have substantial direct and measurable benefits to the local population.

#### 6.4 Social Trust and Cohesion

The confluence of current developments in the international stage interweaves with country-specific events, such as the resurgence of nationalism that challenges rules-based order, the proliferation of disinformation, and efforts towards historical revisionism, which undermine the tenets of democratic institutions. This weakening of institutions comes at the most inopportune time when the breadth and depth of social cleavages along the lines of wealth and social and human capital have become more evident. It is, therefore, of paramount importance for the Philippines to strengthen the fabric of social trust in institutions and leaders moving forward with the new era of globalization. This can be done through the concerted actions of the government, the private sector, and traditional and alternative medlia platforms towards transparency and accountability.

Erosion of social cohesion begins with distrust between and among individuals. It is necessary to fight the information disorder by putting information to order. Worldwide, the Philippines is at the top of social media use in the last four years and the government, the private sector, and the digital media platforms should work hand in hand to combat the misuse and abuse of these alternative media.<sup>5</sup> Some of the potential measures that the country can implement include the following:

1) Safeguard alternative media platforms from being exploited as a vehicle of disinformation

A popular call to stop disinformation is through fact-checking. However, it has been received by the online community with caution since fact-checking needs authorities and guidelines/standards. Without these, fact-checking runs into the danger of further fueling sociopolitical divide. Therefore, it is important to develop mechanisms for fact-checking through approaches that include all stakeholders (Ong and Cabanes 2018; Wardle 2017). Fostering inclusivity develops a sense of ownership and this can potentially result not only in forming standards in fact-checking mechanisms but in helping to establish a credible body of authority to implement such standards.

In addition, alternative media platforms need to develop stronger mechanisms that detect messages coming from automatic bot accounts. They also need to monitor trending topics and analyze the content of messages for potential propaganda and hate campaign.

<sup>&</sup>lt;sup>5</sup> https://www.rappler.com/technology/news/222407-philippines-online-use-2019-hootsuite-we-are-social-report.

#### 2) Promote digital media literacy at schools and in the workplace

Users need to become literate in dealing with online information and in engaging in digital discourse and schools and the workplace, where people interact and share ideas, are among the best places to get this literacy started. In the early 2019, Facebook launched *Digital Tayo*, an effort to promote digital hygiene through learning modules that are designed to enhance critical thinking in the online sphere. Its template can be adapted and improved on by the Department of Education and by various government agencies to widen and deepen the reach of digital literacy. Other social media platforms can also learn from this initiative.

In addition to the recommendations related to social media platforms, the following are recommended for traditional media, employers, and the government:

1) Strengthen gatekeeping and inclusivity in the traditional media's conduct of doing business

The erosion of trust in institutions, coupled with the availability of diverse alternative media platforms, necessarily dictates a new landscape for the traditional media to conduct their business. Now more than ever, traditional media need to be more effective in their role as gatekeepers of information. This means that they have to be aggressive in verifying the information they pick-up from the social media so they can put forward counter narratives and they do not (accidentally) legitimize fake news.

Most traditional media are owned by the elite and this potentially contributes to the erosion of trust in the traditional media. Hence, they need to promote inclusive representation and amplify new or unheard voices (Ong and Cabanes 2017).

#### 2) Encourage employers/CEOs to spearhead trust-building in their organizations

People trust the ones they know and recent evidence indicates that they turn to their employers for guidance, assurance, and certainty (Edelman 2018). Leaders and CEOs of organizations can spearhead trust-building not only through excellent and honest conduct of doing business but by fostering fairness (e.g. merit-based promotion) and taking a stand on social issues such as corruption, inequality, and harassment.

#### 3) Adopt innovative solutions to doing business in the public sector through new technologies

The advent of the Blockchain technology has opened up big potentials in increasing efficiency and transparency and reducing fraud, corruption, and transaction costs. Since this is an emerging technology, even in the developed world, much remains to be understood. Therefore, it is important not only to understand what this technology is but to find answers to the questions of the uninitiated. What are the challenges, limitations, and obstacles in the adoption of Blockchain technology in developing economies? How will existing data exchange and privacy laws affect the adoption of this technology? What are the risks involved and how can these be prevented?

To shed light to these issues, there is a need to engage international experts so that developing economies like the Philippines can fully understand the scope and breadth of issues and challenges associated with its adoption. Doing so can help ensure that the problems in alternative media platforms will not be repeated in Blockchain technology.

#### 7. Concluding Remarks

Navigating the turbulent seas of the new globalization is difficult, but not impossible. Foresight and anticipation, rather than reactive decision-making, will almost certainly be an advantage. Moreover, no single navigator determines the fate of the ship; an entire system – the ground crew that assures seaworthiness, the operating crew on board, the navigational infrastructure providing outside guidance – all these elements must work together seamlessly for a successful voyage. In the end, disaster is inevitable if we all drift passively with the undercurrents of polarization and fragmentation. Rather, the new globalization must be met by even more concerted attempts at cooperation and collaboration among governments, public and private organisations, and even individuals – all who have a stake in the global future.

#### **Bibliography**

Alvaredo, F, L. Chancel, T. Piketty, E. Saez, and G. Zucman. 2018. World inequality report 2018. Paris: World Inequality Lab, Paris School of Economics.

American Council for Technology–Industry Advisory Council. 2017. Enabling blockchain innovation in the US Federal Government: A blockchain primer.

Arrow, K. 1972. Gifts and exchanges. *Philosophy and Public Affairs*, 1(4), 343–362.

Bennet, W. and B. Pfetsch. 2017. Rethinking political communication in a time of disrupted public spheres. *Journal of Communication*, 68, 243–253.

Berryhill, J., T. Bourgery, and A. Hanson. 2018. Blockchains unchained: Blockchain technology and its use in the public sector. OECD Working Papers on Public Governance No. 28, OECD Publishing, Paris. <a href="http://dx.doi.org/10.1787/3c32c429-en">http://dx.doi.org/10.1787/3c32c429-en</a> (accessed on May 1, 2019).

Birdsall, N., and A. Diofasi. 2015. Global public goods for development: How much and what for. Center for Global Development Note 5. <a href="https://www.cgdev.org/sites/default/files/CGD-Note-Birdsall-Diofasi-Global-Public-Goods-How-Much.pdf">https://www.cgdev.org/sites/default/files/CGD-Note-Birdsall-Diofasi-Global-Public-Goods-How-Much.pdf</a> (accessed on June 14, 2019).

Bradshaw, C.J.A., and associates. 2016. Massive yet grossly underestimated global costs of invasive insects. *Nature Communication*, 7(12986).

Brynjolfsson, E., A. Collis, W.E. Diewert, F. Eggers and K.J Fox. 2019. GDP-B: Accounting for the value of new and free goods in the digital economy. NBER Working Paper 25695. Cambrdige, MA: National Bureau of Economic Research.

Caplan, B. and T. Cowen. 2004. Do we underestimate the benefits of cultural competition? *The American Economic Review*, 94(2), 402–407.

Clarete, R., E. Esguerra, and H. Hill. 2018. The Philippines, Overview. In: Clarete, R, E. Esguerra, H. Hill, eds. The Philippine Economy: No Longer the East Asian Exception? ISEAS-Yusof Ishak Institute: Singapore.

Copeland, B.R., and M.S. Taylor. 2004. Trade, growth and the environment. *Journal of Economic Literature*, 42(1), 7-71.

Deaton, A. 2013. The great escape: Health, wealth, and the origins of inequality. Princeton, N.J.: Princeton University Press.

Department of Budget and Management [Philippines]. 2019. Budget of Expenditures and Sources of Financing Fiscal Year 2019: Building a bright future for the Philippines and its people. Manila, Philippines: DBM.

Edelman. 2019. 2019 Edelman Trust Barometer. <a href="https://www.edelman.com/trust-barometer">https://www.edelman.com/trust-barometer</a> (accessed on May 1, 2019).

Fukuyama, F. 1992. The end of history and the last man. New York: Free Press.

Government Office for Science (n.d.). Distributed ledger technology: Beyond block chain, A report by the UK Government Chief Scientific Adviser. <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/492972/gs-16-1-distributed-ledger-technology.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/492972/gs-16-1-distributed-ledger-technology.pdf</a> (accessed on May 1, 2019).

Guillen, M. 2001. Is globalization civilizing, destructive or feeble? A critique of five key debates in the social science literature. *Annual Reviews in* Sociology, 27(1): 235–260

Johnson, P. and C. Papageorgiu. Forthcoming. What remains of cross-country convergence? Journal of Economic Literature.

Juffe-Bignoli, D. and associates. 2016. Assessing the cost of global biodiversity and conservation knowledge. *PLoS ONE*, 11(8): e0160640.

Kaul, I. 2019. Conceptualizing global public policy: A global public good perspective. In D. Stone and K. Moloney, Eds., *The Oxford Handbook of Global Policy and Transnational Administration*. UK: Oxford University Press.

Kaul, I., D. Blondin, and N. Nahtigal. 2016. Introduction. In I. Kaul, Ed., *Global Public Goods*. The International Library of Critical Writings in Economics Series. UK: Edward Elgar Publishing.

Kaya, Y. and Karakoc, E. 2012. Civilizing vs. destructive globalization? A multi-level analysis of anti-immigrant prejudice. *International Journal of Comparative Sociology*, 53(1). 23–44

Kenny, C., M. Snyder, and D. Patel. 2018. Measures of global public goods and international spillovers. Center for Global Development Working Paper 474. <a href="https://www.cgdev.org/publication/measures-global-public-goods-and-international-spillovers">https://www.cgdev.org/publication/measures-global-public-goods-and-international-spillovers</a> (accessed on June 14, 2019).

Knack, S. and P. Keefer. 1997. Does social capital have an economic payoff? A Cross-Country Investigation. *The Quarterly Journal of Economics*, 112(4), 1251-1288.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny. 1997. Trust in large organizations. *American Economic Review*, 87, 333-38.

Mcquinn, A. and D. Castro. 2019. A policymaker's guide to blockchain. Information technology and Innovation Foundation.

Milanovic, B. 2016. Global Inequality: A new approach for the age of globalization. Harvard University Press, Cambridge MA.

NEDA. 2016. Ensuring Sound Macroeconomic Policy. Philippine Development Plan. NEDA

Nordhaus, W.D. 2006. Paul Samuelson and global public goods: A commemorative essay for Paul Samuelson. In M. Szenberg, L. Ramrattan, and A.A. Gottesman, Eds., *Samuelsonian economics and the twenty-first century*. UK: Oxford University Press.

OECD. 2011. Perspectives on global development 2012: Social cohesion in a shifting world. OECD Publishing, Paris.

Ong, J. and J. Cabanes. 2018. Architects of networked disinformation: Behind the scenes of troll accounts and fake news production in the Philippines. <a href="https://newtontechfordev.com/wp-content/uploads/2018/02/ARCHITECTS-OF-NETWORKED-DISINFORMATION-FULL-REPORT.pdf">https://newtontechfordev.com/wp-content/uploads/2018/02/ARCHITECTS-OF-NETWORKED-DISINFORMATION-FULL-REPORT.pdf</a> (accessed on May 1, 2019).

Paqueo, V., A. Orbeta, and L. Lanzona. 2016. The impact of legal minimum wages on employment, income, and poverty incidence in the Philippines.

Polillo, S. 2012. Globalization: Civilizing or destructive? An empirical test of the international determinants of generalized trust. *International Journal of Comparative Sociology*, 53(1), 45–65.

Prier, J. 2017. Commanding the trend: Social media as information warfare. *Strategic Studies Quarterly*, 11(4), 50-85.

Publico Staff. 2013. President Obama on inequality (transcript). Politico. <a href="https://www.politico.com/story/2013/12/obama-income-inequality-100662">https://www.politico.com/story/2013/12/obama-income-inequality-100662</a> (accessed on September 5, 2019).

Ritzen, J. and M. Woolcock. 2000. Social cohesion, public policy, and economic growth: Implications for countries in transition. Address prepared for the Annual Bank Conference on Development Economics (Europe), Paris, June 26-28, 2000

Rodrik, D. 1999. Where Did All the Growth Go? External Shocks, Social Conflicts, and Growth Collapses. *Journal of Economic Growth*, 4(4), 385-412

Rogelj, J., D.L. McCollum, A. Reisinger, M. Meinshausen, and K. Riahi. 2013. Probabilistic cost estimates for climate change mitigation. *Nature*, 493(7430), 79-83.

Samuelson, P. 1954. The pure theory of public expenditure. *The Review of Economics and Statistics*, 36(4), 387-389.

Schwab, K. 2019. Globalisation 4.0: A new architecture for the Fourth Industrial Revolution. Foreign Affairs. <a href="https://www.foreignaffairs.com/articles/world/2019-01-16/globalization-40">https://www.foreignaffairs.com/articles/world/2019-01-16/globalization-40</a>. (accessed on May 1, 2019).

Spence, A. M. 2018 Restructuring of the World. Council on Foreign Relations

Stray, J. 2017. Defense against the dark arts: networked propaganda and counter-propaganda, Tow Center for Digital Journalism. <a href="https://medium.com/tow-center/defense-against-the-dark-artsnetworked-propaganda-and-counter-propaganda-deb7145aa76a">https://medium.com/tow-center/defense-against-the-dark-artsnetworked-propaganda-and-counter-propaganda-deb7145aa76a</a> (accessed on May 1, 2019).

United Nations Secretary-General. 2017. Fulfilling the promise of globalization: advancing sustainable development in an interconnected world. Report of the Secretary-General. Submitted to the United Nations General Assembly.

United Nations. 1945. Charter of the United Nations and Statute of the International Court of Justice. Accessed from <a href="https://treaties.un.org/doc/publication/ctc/uncharter.pdf">https://treaties.un.org/doc/publication/ctc/uncharter.pdf</a> (accessed on June 14, 2019).

Vanham, P. 2019. A brief history of globalization. <a href="https://www.weforum.org/agenda/2019/01/how-globalization-4-0-fits-into-the-history-of-globalization/">https://www.weforum.org/agenda/2019/01/how-globalization-4-0-fits-into-the-history-of-globalization/</a> (accessed on May 1, 2019).

Wardle, C. and H. Derakhshan. 2017. Information disorder toward an interdisciplinary framework for research and policymaking. Council of Europe report.

Whiteley, P. 2000. Economic growth and social capital. *Political Studies*, 48(3), 443–466.