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# Editorial Statement

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# Editorial Statement

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# A Brief Review on the US-China Tech Cold War

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Since the United States adopted the pivot to Asia–Pacific policy in 2009, the interactions between the two superpowers, China and the US, have become more and more complicated. The Trump administration, which took office in 2017, adopts the strategy of limiting and balancing China’s influences as a key foreign policy. After launching a trade war on China, the US imposed sanctions on ZTE Corporation in mid-2018, indicating that technology has become another key battlefield between the US and China. In the past two years, this conflict, which was named as the Tech Cold War by the media, has gradually spread to the aspects of network security, mobile communication and establishment of cyber forces.

Although some observers predicted that the outbreak of novel coronavirus might lead to a temporary mitigation of strategic confrontation between the US and China, in reality, Washington and Beijing are trying to place the blame on each other for the spread of epidemic. President Trump and senior US officials have repeatedly accused China of covering up the epidemic and passing the damages onto other countries. Strong language such as “Chinese Virus” which is directed against China is frequently used in their speeches.

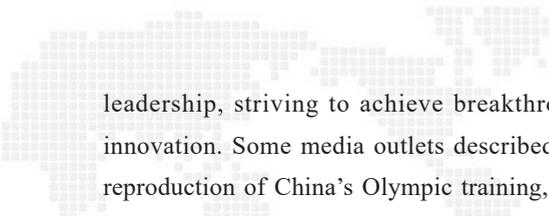
At the same time, the US and China have not stopped promoting scientific and technological research and development despite the heavy anti-epidemic workload. They have gone even further and attempted to apply the technology to epidemic prevention. For example, the Chinese government has continued to expand its investment in such technology projects as 5th Generation Mobile Networks in the face of severe epidemic. Meanwhile, artificial intelligence technology is being used to develop the "regional epidemic prediction system" and "pneumonia auxiliary

diagnosis system." The US government is cooperating with Amazon, Microsoft, Google and other enterprises to explore the possibility of collecting and analyzing epidemic information with artificial intelligence technology to support decision-making in epidemic prevention. Some US enterprises have developed preliminary epidemic detection systems using Edge Computing technology. All these attempts aim to transform the technological advantages of the US into its epidemic prevention strength.

Therefore, the outbreak of novel coronavirus did not effectively alleviate the confrontation between the US and China, nor did it dissolve the Tech Cold War between both sides. Instead, the outbreak ushered the tech war between the two superpowers onto a more concrete and pressing stage of competition.

When the trump administration imposed sanctions on China's representative technology companies such as ZTE Corporation and Huawei, it put forward various criticisms on China's security and human rights protection. The US accused China of expanding its strategic influence by technology, damaging cyber security, stealing intellectual property rights and theft of users' personal information and privacy. Although the accusations are legitimate to a certain extent, it is not true to say the US fully based its policy considerations on the above reasons. If the US government attaches so much importance to the information security and privacy of internet users, at the same time of imposing sanctions on China's enterprises, it should demand local technology enterprises such as Google and Facebook to make improvements in this regard. After all, there have been many instances in which those American enterprises infringed users' privacy or even abused resources to intervene in politics and stirred up controversies. In the final analysis, the competition for technological advantages is the real reason for the US to launch this Tech Cold War.

In the past decades, China's investment in technology research and development has increased significantly, and has drastically narrowed the gap between China the US in terms of overall scale. More importantly, the Chinese government has adopted the development model of "the government leads and the whole nation dedicate" in the fields of key technologies. Through direct interventions of the government, human and material resources are concentrated under powerful



leadership, striving to achieve breakthroughs in research, development and innovation. Some media outlets described this model as the technology field's reproduction of China's Olympic training, in which China committed the whole nation's resources into nurturing Olympic gold medalists. In recent years, China has made remarkable achievements in certain technologies with strategic value, such as 5th Generation Mobile Networks, Quantum Communication, artificial intelligence and gene editing. Although China may not be leading other countries in terms of level in technology, it renders bolder practical applications on relevant technologies, and is less constrained by ethics and human rights protection. This is conducive to the accumulation of practical data and commodification experience.

Although the US still holds leading advantages in information technology, China's momentum to catch up in key areas and its strong ambitions to pursue the status of a powerful country in technology have made quite an impact on the perception of the American political elites and the public. Some media outlets have described this as another "Sputnik Moment" of the US. The US society is consumed by the severe anxiety of falling behind the competitor. In addition to the anti-China sentiment in the political circles, President Trump and many senior US officials have repeatedly expressed concern about the momentum of China's technological advancement.

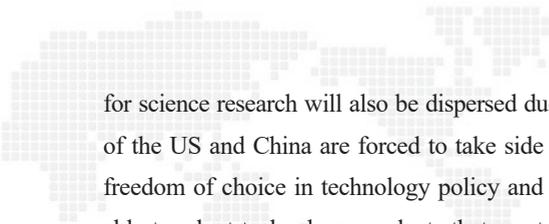
From the point of views of many American political elites, it is a normal phenomenon that China gradually climbs up in the global value chain with the development of the country. However, the problem is that China's technology industry has largely grown under the umbrella of state power, and this industrial ecology has distorted the market mechanism. Robert E. Lighthizer, the US trade representative, mentioned that fair business competitions with foreign countries were acceptable to the United States, but the competition initiated by China involved political manipulation. He accused the Beijing authorities of setting various unfair policies, forcing the foreign enterprises to transfer technology and intellectual property rights to Chinese enterprises, in order to gain competitive advantages. Lighthizer pointed out that this is not acceptable to the US. Therefore, from the US's perspective, the Tech Cold War launched by the Trump administration is merely a response to the unfair competition policies adopted by

China for many years. Furthermore, the US is taking measures to stop Chinese technology enterprises from acquiring critical technologies and products, just like the way China has blocked Western technology enterprises such as Google from entering its domestic market by administrative means. However, from the perspective of China, the Xi Jinping administration regards reducing its dependence on foreign technology as its strategic goal. Even if China encounters resistance from the US side, it will continue to strive for technological independence and develop a highly independent technology supply chain. Therefore, the Tech Cold War is just at its beginning stage. It is bound to be more intense in the future, and its scope of influence will continue to expand.

From a macro perspective, the Tech Cold War between the US and China is merely a derivative of the transformation in the economic and trade interactions between the two countries. Several decades ago, when the US and China were at the upstream and the downstream of the supply chain respectively, they had formed a close and interdependent relation. The interdependent relation sometimes served as a buffer in the volatile political competition between the two countries. However, as China's industries upgrade, the positions of the US and China in the supply chain has get closer even partially overlapping, and as a result, economic competition gradually outstrips cooperation. Not only did economic cooperation and trade lost the function of buffering, but they also turned into major reasons of political friction between the two countries. This transformation of industrial positioning from interdependence to competition and confrontation is fully applicable to the history of US-China relations in the field of technology.

It is worth noting that while the US tightens China's access to American technology, China has also adopted similar regulatory measures in the technologies industries that have achieved considerable results. As the Tech Cold War get more and more intense, one possible prospect is that the US and China will block each other from acquiring its own technology products. Furthermore, they will develop independent research and development mechanisms and commercial systems.

The situation may be satisfactory for the political elites of both countries as it meets their strategic expectations of technological independence, but the innovative resources



for science research will also be dispersed due to political factors. The allied countries of the US and China are forced to take side in the Tech Cold War, and thus lose the freedom of choice in technology policy and application. The countries would not be able to adopt technology products that meet the actual needs of the country and will only be allowed to follow the footsteps of the US or China. In the long run, the world may be vaguely split into two factions at least in the field of technology.

Faced with the enormous pressure from the US, Xi Jinping and many Chinese political elites have shown self-confidence to the outside world, but China is facing many difficulties in this competition.

Through long-time observations of industry developments, we can acknowledge that China's technology industry has advantages in technology application and pricing strategies. However, the industry lacks independence in core technology development, and cannot get rid of the reliance on Western enterprises. While some observers believe that in the medium and long-term, the US's ban on Chinese enterprises may become the momentum to accelerate China's effort towards technological independence; the development of the matter may not be so promising. After all, at a time when the Western countries were not yet highly aware of China's rising in technology, China did not manage to achieve significant progresses in its own development of core technologies. Some of the important items which China claimed to be domestic products, such as chips, are actually imitations or modification of foreign products. As the US strengthens its control of technology trade with China, China's ongoing path to technological independence will be blocked by more obstacles.

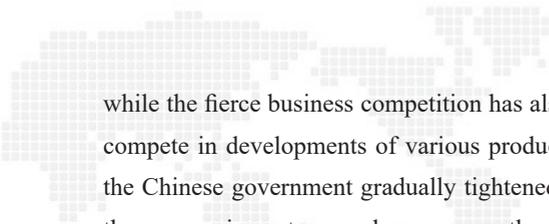
At the same time, China's domestic market has developed into a localized product ecosystem that differs from the international community, due to the adoption of isolation policies for many years. In spite of this, for such enterprises as Huawei which strive for breaking into the international markets, the impact from American regulations is still enormous. Taking mobile operating system as an example, it is very difficult to convince international consumers from various countries to move away from the iOS and Android systems and accept such new systems as Harmony OS developed by Chinese manufacturers, as the older systems

are mature, stable and have been used for many years. Even larger enterprises, like Microsoft and Nokia in its heyday, lost the battles when they tried to create their own systems. Regardless of how the Chinese government and technology enterprise like Huawei promote the advantages of their products, the attempt to challenge the position of Western technology products is certainly an uphill struggle, and the same situation will be applied to the competitions of other technical products.

In the background of the competition in technology between superpowers, the discussion of China's low ability in technological innovation will inevitably lead to another weakness: the rigidity in political system.

In the last century, the US had engaged in a fierce competition in technology with the Soviet Union. Although the Soviet Union led the race for a period, its scientific strength had gradually declined as the competition lengthened. The United States won the Cold War at the end and became the world's leading technological hegemony. In reviewing the history of the Cold War, the critical role of political systems can be noticed. The despotism of the Soviet Union had allowed the government to dominate the management and distribution of national resources, and to concentrate on the pursuit of breakthroughs in critical technology development. However, the ubiquitous control also restricted the freedom of the researchers, and as a result, they were not able to explore other technical fields and their innovations were limited. In contrast, the US provided an open environment for the free exchanges of views between professionals from the government, colleges and relevant industries, which led to many innovative ideas, and create profound competitive advantages. In addition, unlike the communist states which place a high value on obedience, research institutions and the technology industry in the US maintained a certain degree of competition between each other. The pressures of competitions turned into a powerful engine which accelerated advancements.

Will China today also gradually lose this Tech Cold War due to the rigidity in its political system? There is a possibility. The high-speed development in China's internet technology industry since the 1990s has largely benefited from the economic foundation and liberal atmosphere brought by the "reform and opening up". Researchers and many entrepreneurs have been able to unleash their creativity,



while the fierce business competition has also pushed the technology enterprises to compete in developments of various products and services. However, since 2012, the Chinese government gradually tightened its control on political ideologies and the economic system, and suppresses the space of free development for private enterprises and research institutions. In this context, even though China can use its political power and direct its national resources to some key projects and achieve R&D results, its overall technological research and development capacities may fall behind of its rivals in the long run.

To China, winning or losing this Tech Cold War probably means much more than the success or failure in technology. China's economy showed signs of regression since 2012, and many media outlets predicted that China could not escape the Middle Income Trap, and that was when the development of the technology industry turned the situation around. With strong official support in a society culture which pays less attention to human rights protection, the digital economy led by technology enterprises offset the decline in traditional manufacturing industries and created a great number of jobs. Some surveys in 2017 showed that China had risen to be the world's fastest-growing digital economy, which indicates that the technology industry bears unparalleled importance to China today. In other words, if China loses the Tech Cold War, the foundation of its economy will also be severely hit. This may also be one of the reasons why the Trump administration has chosen technology as a key battlefield for the US and China competition.

To summarize, the Tech Cold War between the US and China, which the international community is witnessing, is a struggle between superpowers that has endured longer than many had expected and is more important than many had imagined. The results of the competition will have a profound impact on the ebb and flow of powers between the two countries, and have huge influences on the prospects of international relations. It is a major topic which deserves close observations of every country.

# On the Nexus between Economic Law and International Development: How FTAs can Contribute to Promoting Human Rights

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International trade and investment law are at a crossroad. The World Trade Organization (“WTO”) Dispute Settlement Body (“DSB”) remains paralyzed by its lack of appellate body members, and influential actors including the United States and European Union have moved away from the heavily criticized investor-state dispute settlement model in their recently concluded international investment agreements. Further, any reforms must now be administered against the backdrop of an international pandemic that is challenging market rules. Importantly, several free trade agreements (“FTAs”) concluded at the regional level (“RTAs”) are emerging as promising instruments for introducing innovative solutions for re-writing the rules of international economic law at a time when multilateral negotiations have halted.

This essay looks briefly at two particular models that have recently emerged, the frameworks they prescribe, and their contributions to promoting international development and human rights: (1) the United States-Mexico-Canada Agreement (“USMCA”) and its increased protection for Mexican workers, and (2) the African Continental Free Trade Area’s (“AfCFTA”) “framework agreement” model that affords increased flexibilities to its members’ varying development conditions and its customized iteration of special and differential treatment (“S&D”). Both models represent immense potential not only for development but also fresh, normative approaches for reforming trade and investment law in a more inclusive and equitable way that can deliver globalization’s economic benefits to developing and least-developed countries.



## I. The United States-Mexico-Canada Agreement & Labor Reform in Mexico

Under the USMCA, which entered into force July 1, 2020, Mexico must integrate into its domestic law principles enshrined in the International Labor Organization's ("ILO") Core Conventions including standards on freedom of association and collective bargaining, forced labor, child labor, and non-discrimination.<sup>1</sup> As a result, Mexico established new institutions for registering and overseeing trade unions, thereby recognizing and guaranteeing Mexican workers' rights to organize and collectively bargain. Once they are successfully implemented, trade union representation of local workers should gradually increase the wages of Mexican workers, reduce income inequality, and in turn promote domestic demand.<sup>2</sup> Additionally, labor disputes now fall within the jurisdiction of Mexican courts and the judicial branch and are no longer subject to arbitration and conciliation procedures governed by the executive branch, which generally rendered decisions in favor of corporations.<sup>3</sup> The chapter also contains detailed provisions that afford protections for migrant workers and against violence in the workplace and discrimination on the basis of sex and gender.<sup>4</sup>

The labor chapter also creates enforcement mechanisms to ensure the protection of rights granted to Mexican workers by the USMCA. Most notably, the USMCA establishes the Rapid Response Mechanism for Complainants to bring Denial of Rights claims against employers who are allegedly encroaching on their workers' rights to organize and collectively bargain.<sup>5</sup> Under the Rapid Response Mechanism, an ad hoc international dispute settlement panel can make binding

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1 Alvaro Santos, *Reimagining Trade Agreements for Workers: Lessons from the USMCA*, 113 AM. J. INT'L L. 407, 407 (2019), [https://www.cambridge.org/core/services/aop-cambridge-core/content/view/AF9056844AEAF8085CA7F594AFB32B3C/S2398772319000746a.pdf/reimagining\\_trade\\_agreements\\_for\\_workers\\_lessons\\_from\\_the\\_usmca.pdf](https://www.cambridge.org/core/services/aop-cambridge-core/content/view/AF9056844AEAF8085CA7F594AFB32B3C/S2398772319000746a.pdf/reimagining_trade_agreements_for_workers_lessons_from_the_usmca.pdf).

2 Id. at 409.

3 Id.

4 Office of the U.S. Trade Rep., Exec. Office of the President, *Agreement between the United States of America, the United Mexican States, and Canada 05/30/19 Text*, Arts. 23.7, 23.8, and 23.9 (2018).

5 Stephen S. Kho et. al., *The USMCA's Facility-Specific Rapid Response Labor Mechanism: Are You Ready for It?*, Akin Gump Strauss Hauer & Feld LLP (June 17, 2020), <https://www.akingump.com/en/news-insights/the-usmcas-facility-specific-rapid-response-labor-mechanism-are-you-ready-for-it.html>.

determinations on whether specific employers are in compliance with Mexico's labor reforms.<sup>6</sup> After a Complainant submits its request, a Respondent may conduct its own review and is allowed an opportunity to address any violations, if found. Should a Respondent fail to comply with the review procedure, the Complainant may request establishing a panel that makes an independent determination.<sup>7</sup> The panel must afford both parties the opportunity to present their cases; the burden of proof lies with Mexican employers who must demonstrate that their workers' rights are being effectively protected.<sup>8</sup> The United States and Canada may enforce a panel's decision by suspending preferential tariff treatment or blocking entry of goods from any non-compliant facilities.<sup>9</sup>

Moving forward, countries should seek to integrate labor and related human rights into their international economic law instruments and allow for disputes to be brought before institutions such as the WTO DSB or investment arbitral tribunals that can make binding decisions. Doing so compels countries, such as Mexico, who have signed onto the ILO Conventions to enforce violations and meet their treaty obligations. Being held accountable by international legal bodies incentivizes both developing country governments to reform local enforcement mechanisms and employers to bring their practices into compliance with international labor standards so as to avoid costly international litigation.

## **II. The African Continental Free Trade Area as a Model for Trade & Sustainable Development**

Signed in March 2018 and entered into force in May 2019, the AfCFTA joins together 54 African states and 1.2 billion people in a single market worth between

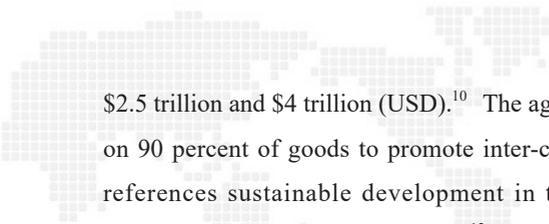
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6 Id.

7 Warren H. Maruyama, *USMCA'S Rapid-Response Labor Mechanism*, Hogan Lovells 1 (Feb. 7, 2020), [https://www.hoganlovells.com/~/\\_media/hogan-lovellis/pdf/2020-pdfs/2020\\_02\\_07\\_usmca\\_rapid\\_response\\_labor\\_mechanism.pdf](https://www.hoganlovells.com/~/_media/hogan-lovellis/pdf/2020-pdfs/2020_02_07_usmca_rapid_response_labor_mechanism.pdf).

8 Kho, *supra* note 6.

9 Maruyama, *supra* note 7, at 3.



\$2.5 trillion and \$4 trillion (USD).<sup>10</sup> The agreement aims not only to remove tariffs on 90 percent of goods to promote inter-continental trading<sup>11</sup> but also explicitly references sustainable development in the areas socio-economic inclusion, gender equality and food security.<sup>12</sup> While the AfCFTA has not yet been fully implemented, it will likely have a profound impact for Africa and on international law and economics generally provided its size, scope and approaches.<sup>13</sup>

The AfCFTA represents a “framework agreement” model – a core agreement serves as a foundation to be built out over several negotiation phases. Phase I negotiations established Protocols on Trade in Goods and Services, Dispute Settlement, Rules of Origin, and schedules detailing members’ concessions.<sup>14</sup> Although Phase I was originally scheduled to be fully operational this July, the Covid-19 pandemic has delayed its implementation until early 2021.<sup>15</sup> Phase II negotiations will create the Protocols on Intellectual Property Rights, Competition Policy, and Investment.<sup>16</sup> Phase III negotiations will create the Protocol on E-Commerce.<sup>17</sup> The framework agreement model is quite distinct from existing RTAs as it allows for “progressive” or “incremental” negotiation of trading terms that are purposefully drawn out and organized into negotiation phases based on members’ priorities and capacities to administer domestic legal reform. The AfCFTA’s framework further provides for periodic review of the agreement’s

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10 Katrin Kuhlmann & Akinyi Lisa Agutu, *The African Continental Free Trade Area: Toward a New Legal Model for Trade and Development*, 51 *GEO. J. INT’L L.* 1, 4 (2020).

11 Kigali and Abuja, *Forty-four African countries sign a free-trade deal*, *THE ECONOMIST* (Mar. 22, 2018), <https://www.economist.com/middle-east-and-africa/2018/03/22/forty-four-african-countries-sign-a-free-trade-deal>.

12 Agreement Establishing the African Continental Free Trade Area art. 3, Mar. 21, 2018, 58 *I.L.M.* 1028, Art. 3(e), (g).

13 Kuhlmann & Agutu, *supra* note 10, at 60.

14 Operational Phase of The African Continental Free Trade Area Launched, *AFRICAN UNION*, (last visited Dec. 22, 2020), <https://au.int/en/articles/operational-phase-african-continental-free-trade-area-launched>.

15 Kuhlmann & Agutu, *supra* note 10, at 5.

16 AfCFTA enters into force; Phase II on investment, competition, IPRs to last through 2020-2021, *International Institute for Sustainable Development* (June 27, 2019), <https://www.iisd.org/itn/en/2019/06/27/afcfta-enters-into-force-phase-ii-on-investment-competition-iprs-to-last-through-2020-2021/>.

17 Gerhard Erasmus, *Will there Be a Phase III for the AfCFTA?*, *TRALAC* (Mar. 27, 2020), <https://www.tralac.org/blog/article/14464-will-there-be-a-phase-iii-for-the-afcfta.html>.

substance every five years and the flexibility to negotiate additional chapters to be incorporated into its foundation should new international trade, investment, and development opportunities or challenges arise.<sup>18</sup>

The AfCFTA further adopts a revised, rules-based approach to S&D that represents the interests of diverse African states and serves as a framework for revising international economic law generally to better harness the potential for international trade in promoting development. Under WTO law, S&D affords developing and least-developed countries preferential trading arrangements,<sup>19</sup> longer transition periods to implement legal requirements,<sup>20</sup> capacity building and aid for trade.<sup>21</sup> Traditional S&D has been subject to much criticism, however, largely surrounding its ineffectiveness in promoting development by allowing members to self-designate as “developing.”<sup>22</sup> Conversely, the AfCFTA’s customized iteration of S&D recognizes the nuances in members’ varying stages and conditions of development by granting flexibilities “on a case by case basis, to accommodate special economic situations and development, trade and financial needs of the state parties.”<sup>23</sup> Further, according to Article 6 of the Trade in Goods, “State Parties shall [ ] provide flexibilities to other State Parties at different levels of economic development or that have individual specificities *as recognized by other State Parties*.”<sup>24</sup> This allows for not only a more tailored and differentiated approach based on factors including members’ level of industrialization, the size of their agricultural sectors, resource endowments, proximity to ports and conflict statuses,<sup>25</sup> but also resolves the issue of self-designation. Ultimately, the AfCFTA’s

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18 Kuhlmann & Agutu, *supra* note 10, at 6-7.

19 The General Agreement on Tariffs and Trade’s enabling clause permits developed countries to provide preferential treatment to poorer countries such as in the form of lower tariff rates for their imports on a non-reciprocal basis in violation of Article I’s Most Favored Nation rule,

20 For instance, least-developed countries need not implement the Agreement on Trade-Related Aspects of Intellectual Property Rights until 2021.

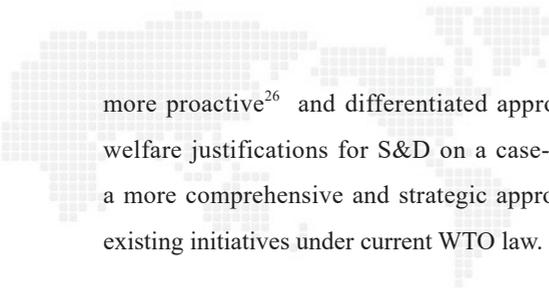
21 Kuhlmann & Agutu, *supra* note 10, at 13-14.

22 *Id.* at 19-20.

23 AfCFTA, Protocol on Trade in Services, Mar. 21, 2018, 58 I.L.M. 1028, 1053, art. 7.

24 AfCFTA, Protocol on Trade in Goods, Mar. 21, 2018, 58 I.L.M. 1028, 1043, art. 6 [emphasis added].

25 Kuhlmann & Agutu, *supra* note 10, at 22.



more proactive<sup>26</sup> and differentiated approach that considers the economic and welfare justifications for S&D on a case-by-case basis will hopefully result in a more comprehensive and strategic approach for facilitating development than existing initiatives under current WTO law.

### **III. Conclusions**

In an age where globalization continues to face back-lash and multilateral consensus seem increasingly difficult to achieve, RTAs have emerged as promising tools for fostering cooperation especially in the context of international development. At the regional level, both the USMCA and AfCFTA introduce innovative approaches to reforming trade and investment processes that may serve as the basis for re-writing international law at multilateral forums in the near future. International economic law must abandon its top-down approach to rulemaking and consider the alternative models prescribed by these instruments to better represent the interests of all actors in the international political area if it is to overcome unique challenges of the twenty-first century.

# Combating COVID-19 using digital technology in APEC region

*Ting Yu Lin*

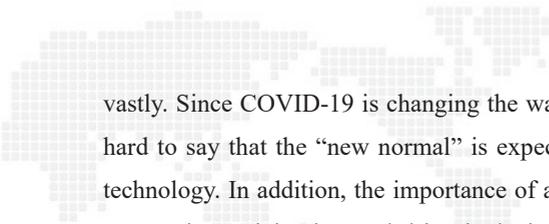
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National Yang-Ming University

In 2020, the global health crisis has adversely affected the well-being and livelihoods of people across the Asia-Pacific region. The outbreak of the COVID-19 has caused over 27 million confirm cases and more than 900,000 death in the world (by the date 12th September, 2020). As the end of the pandemic is still far from reality as well as result to tremendous disruptions on both demand and supply sides of the global value chain (GVC), it is urged for each sector to share their best practices and to focus on substantive topics. The resiliency of health systems and supply chain are in need to be strengthened, also, the role of digital health plays moving forward.

To relieve such global tension accompanied with economic disturb, the first statement on the corona virus was issued by the APEC Health Working Group (HWG) in March, which not only reaffirms the central importance of collaboration at all levels to combat this infectious disease but also commit to working together to bring this epidemic under control as fast as possible. Moreover, the APEC Ministers Responsible for Trade (MRT) has also launched a statement in early May to call out on the collaboration at all levels across the region to accelerate the fight against COVID-19 and commit to work closely to defeat this pandemic with urgency.

## **Digitalization as the initial step toward combating the COVID-19**

From the experiences shared by some economies, it is notable that the impact of digital technologies is especially distinguishable. National policies like monitoring, stockpiling medical resources, diagnosing and telemedicine count on technologies



vastly. Since COVID-19 is changing the way we used to live for decades, it is not hard to say that the “new normal” is expected to be much more relied on digital technology. In addition, the importance of a robust digital connectivity to promote economic participation and drive inclusive growth is very much in need. Thus, this can refer that the development of digital health will be more in line with the "people-centric" principle as it impacts the health of every individual and local community.

With the development of digitalisation, the government needs to firstly restate the importance of a robust digital infrastructure and widespread digitization of services, especially for disadvantaged groups such as those who live in rural or mountain areas. This includes both physical infrastructure assets and regulatory regimes that enable society to maximize the benefits of digital connectivity. Correspondingly, given the introduction of digital technologies in the health sector is helpful for increasing efficiency, medical services which also make the medical services become more available and affordable. It is also reasonable to expand the use of interoperable data systems, reduce healthcare expenses, improve the quality and equity of healthcare.

In the digital health sector, there is a wide-ranging space for further exploration which includes issues like mobile health (mHealth), health information technology (IT), telehealth or telemedicine, wearable devices and personalized medicine. Innovations in this field can critically improve quality and access to care. They are a significant driver to shape the future of primary health care and expected to have a profound effect on how health services are delivered and how health systems run. Although the develop stage of each economies varies, more and more investment in the application and R&D of digital health is witnessed in almost every member economy in the region.

## **First step for regional health cooperation in the digital era during the pandemic**

With the development of traveling, we see distance less as a factor in diseases’

transmission; however, with the development of digital technology, a more efficient way to cooperate cross border rise. We can therefore argue that regional cooperation is crucial during the pandemic. To response to the MRT statement, APEC economies have committed to exchange health information. Apart from information sharing, exchanging best practices to promote the cooperation in fighting the public health crisis is also essential in the cross broader support. To make this long-lasting, regional cooperation should be sustained and strengthened to ensure resilience and revive regional growth going forward.

With the commitment and consensus APEC economies had already reached, promoting digital inclusion and bridge the digital divide for disadvantaged groups has been APEC's goal and mission for years. Thus, with governments' consideration of the strategic approaches in network preparation in promoting cooperation between economies in the digital era is essential. For example, building out visual networks in preparation for similar challenges in the future. However, we can still see that some people live in rural or mountain areas in APEC economies remain unconnected.

As a result, governments should be encouraged to invest more in ICT infrastructure and adopt more supportive policies. Moreover, maintaining existing digital infrastructure is also critical that governments take steps to ensure the resilience of existing infrastructure.

## **Digital prevention measures**

The use of digital health policies in prevention varies in the region. As we can see that ICT technologies is helpful for tracking record, infographic and websites resources are more accurate in introducing demonstrate policies, statistics, and facts. APEC as a cooperation with members with most diverse cultures, different economies apply measures unlikely the same based on the development of technology status and their culture, which is also benefit to others when exchanging best practices. The exchange of policy experiences between member economies is expected to help us learning from each other and pave the way for further



cooperation as the impacts of the pandemic is still felt. Therefore, the digital health gap and regulatory diversities among APEC economies should be discussed before any solution suggested.

Applications like telemedicine, AI-enabled drug screening and CT diagnostics provide significant support in our ongoing fight against the virus. Some economies accelerate the process for launching telemedicine during this public health challenge while some use basic technology, such as drone, for keeping people in a social distance. These are seeing increasingly broader use on a national and regional scale.

Considering strict social distancing requirements, remote healthcare, telemedicine, online course and online shopping have become a must for the proper functioning of society. None of this would be possible without strong and readily available digital connectivity. We can thus argue that investment in digital fields is the most effective way to support economic growth.

The corona virus brings opportunities to reimagine what is possible and desirable for our future in promoting public health. Varying digital health technologies are currently being designed to address the crisis and emergencies with different social-economic conditions. The efficiency of digital tools/measures is what APEC economies have taken for combating the pandemic as priority.

## **Resources:**

- Statement on COVID-19, APEC Ministers Responsible for Trade 5 May, 2020
- APEC Health Working Group Statement on COVID-19, the APEC Health Working Group, 23 March, 2020
- APEC in the Epicentre of COVID-19, APEC Secretariat, APEC Policy Support Unit, April 2020