

About PECC

The Pacific Economic Cooperation Council (PECC) is a non-profit, policy-oriented, regional organization dedicated to the promotion of a stable and prosperous Asia-Pacific. Founded in 1980, PECC brings together thought-leaders from business, civil society, academic institutions, and government in a non-official capacity. Together, PECC members anticipate problems and challenges facing the region, and through objective and rigorous analysis, formulate practical solutions. The Council serves as an independent forum to discuss cooperation and policy coordination to promote economic growth and development in the Asia-Pacific. PECC is one of the three official observers of the APEC process

The State of the Region Project

The State of the Region report is a product of a taskforce established by the governing body of PECC. While efforts are made to ensure that the views of the PECC members are taken into account, the opinions and the facts contained in this report are the sole responsibility of the authors and editorial committee and do not necessarily reflect those of the member committees of PECC, nor their individual members.

Title

State of the Region Report 2020

Authors

Eduardo Pedrosa, Secretary General, Pacific Economic Cooperation Council

Christopher Findlay, Vice-Chair, Australian Pacific Economic Cooperation Committee (AUSPECC) and Honorary Professor, Crawford School of Public Policy, Australian National University

Suggested Citation

Eduardo Pedrosa Christopher Findlay (2020), State of the Region 2020

Editorial Committee

Gordon de Brouwer, Chair, Australian Pacific Economic Cooperation Committee (AUSPECC)

Chul Chung, Vice-Chair, Korea National Committee for Pacific Economic Cooperation (KOPEC)

Chien-Yi Chang, Chair, Chinese Taipei Pacific Economic Cooperation Committee (CTPECC)

Charles E. Morrison, Senior Fellow, East-West Center, USPECC

Jose Rizal Damuri, Chair, Indonesian National Committee for Pacific Economic Cooperation (INCPEC)

Kenichiro Sasae, Chair, Japan National Committee for Pacific Economic Cooperation (JANCPEC)

Tan Khee Giap, Chair, Singapore National Committee for Pacific Economic Cooperation (SINCPEC)

Manfred Wilhelmy, former Chair, Chilean National Committee for Pacific Economic Cooperation (CHILPEC)

Zhao Yali, Vice-Chair, China National Committee for Pacific Economic Cooperation (CNCPEC)

Acknowledgements

We also thank Ambassador Jonathan Fried, Canada's former ambassador and permanent representative to the World Trade Organization and Dr Peter Lovelock, Director of the Technology Research Project Corporate (TRPC) for their contributions. We also thank Ms Betty Ip and Nor Jibani for their work on this report.

PECC International Secretariat Singapore 2020 info@pecc.org

Contents Message from the Co-Chairs	1
Chapter 1: Impact of the Covid-19 Crisis Update	
·	
Economic Outlook	
Big gains, big challenges	
Stimulus Measures	
Impact on Income Inequality	
The External Sector	
Current WTO Challenges and APEC's Role	
The Covid Context for Regional Economic Integration	
International Travel	
Investment	
FDI Inflow Trends	17
Digital sector	18
The Evolution of the Pandemic	20
Vaccine development	22
Information Sharing and Minimizing Supply Chain Disruptions	24
Climate Change	26
Finance for Sustainable Development	29
Conclusions	29
Chapter 2:The New Generation of 'Digital' Trade Agreements: Fit for Purpose?	31
The New 'Digital' Trade Agreements	31
Table 1: Context and Key Provisions of Four Digital Trade Agreements	32
Similarities in 'Digital' Trade Language: A Path Forward?	33
Table 2: Comparison of Key Digital Trade Provisions	33
Table 3: Key and Developing Language Across Digital Trade Agreements	34
Differences in Digital Trade Language	
New 'Digital' Trade Agreements: A Way Forward, A False Start, or A Dead End?	
Table 4: Definitional Gaps Across Digital Trade Agreements	
Appendix 1: Comparison of Language for Eleven Common Provisions Across the Four Agreements	

Message from the Co-Chairs

In response to the Covid-19 crisis, the Pacific Economic Cooperation Council issued a special State of the Region report on the impact of the crisis earlier this year based on a survey of regional policy experts and stakeholders. This report updates the findings of that publication.

This year was supposed to mark a milestone for the region, when Asia-Pacific economies would assess progress made towards the goals of free and open trade in the region and decide on a new vision to drive cooperation and growth for the future. However, just as momentum was building in that process, the Covid-19 pandemic struck and policy-makers rightly focused their attention on dealing with the pressing issue of how to deal with the health, human, and economic crisis confronting our region.

Even now as some of our economies have been able to stem infection rates and are able to exit from lockdowns, others are seeing second waves or even third waves of infections. While economic forecasts are improving, unprecedented government support is holding up aggregate demand. A key concern that arose from our May survey was weak growth expectations over the coming months and years and the impact that would have on investment and consumer spending. We explore that theme in further depth in this report and the actions that can be taken to address the scarring that has and continues to take place.

In our earlier report we argued that that as the region looks beyond the pandemic to an economic recovery, the post-2020 vision, when endorsed by APEC leaders, can provide a long-term strategic framework for regional governments and stakeholders to plan for the future. Without such a framework there is a risk that the recovery will be much slower than need be, opportunities to sustain reform will not be taken, inefficient policies adopted for short term goals will remain stuck in place, and investment plans put on hold.

A post-2020 vision needs to provide a strong signal to businesses and consumers of a commitment to growth and stability. In this report we address what some of those signals might be. We address in particular the challenges facing the WTO and the need for cooperation on the digital economy. We underscore that the vision should address the issues that beset the region prior to the pandemic that were outlined in our task force report on the post-2020 vision. The PECC vision for the region was a simple one:

"An Asia-Pacific community of open interconnected, and innovative economies cooperating to deliver opportunity, prosperity and a sustainable future to all their peoples."

How it is achieved is more complex, but when we surveyed stakeholders on the future of regional cooperation, out of a list of all of 11 topics that cover the major issues addressed by regional cooperation ranging the multilateral trading system, a Free Trade Area of the Asia-Pacific, structural reform, the digital economy, to sustainability and inclusion, the most important issue was "robust dialogue and effective cooperation among member economies. This underscores the value of APEC's non-binding approach and focus on cooperation. The pandemic has only highlighted even more the need for policymakers, scientists, doctors, and businesses – in short broad groups of stakeholders to work together cooperatively to solve issues of mutual concern. Even now as vaccines are on the verge of entering the market, issues of distribution and logistics need to be addressed.

We thank the Editorial Committee of the State of the Region project for their efforts in providing guidance and advice for the project. And we especially express our appreciation to Mr Eduardo Pedrosa, Secretary General of PECC and Coordinator of State of Region Report and Prof Christopher Findlay, Vice-Chair of the Australian PECC Committee for writing this report and Ambassador Jonathan Fried and Dr Peter Lovelock for their contributions.

Don Campbell Co-Chair

Klmold W Empoder

Su Ge Co-Chair

300

Chapter 1: Impact of the Covid-19 Crisis Update

Eduardo Pedrosa and Christopher Findlay

This year was supposed to be a milestone for the Asia-Pacific region when APEC members reached the target date of the Bogor Goals and agreed on a new vision to drive economic growth and integration moving ahead. The Covid-19 pandemic came perhaps as a black swan event. Not because it was a new virus per se, experts have been warning of the threat from viruses for some time, with SARS and MERS serving as just two prior examples, but because it was so infectious and spread so quickly around the world. We live in a world that is more connected than ever, this has brought tremendous benefits in terms of improved livelihoods, but the Covid-19 crisis has underscored the frailties of international systems of cooperation to address pandemics and our responses to them. We need to learn from this experience.

This report updates PECC's Special Report on the Impact of the Covid-19 Crisis. That report was largely based on a survey of stakeholders and policy experts from May to June 2020. One finding from that survey was the significantly greater levels of pessimism on the economic outlook among respondents compared to official forecasts. While official forecasts have improved we highlight that growth remains supported by unprecedented government stimulus. That support remains crucial as does well-laid out exit strategy. The policy recommendations we laid out in our earlier report remain relevant and in this report we thresh them out in more detail.

One central recommendation was the role that a post-2020 vision can play in providing a framework for recovery. Without such a framework there is a risk that the recovery will be much slower than need be, opportunities to sustain reform will not be taken, inefficient policies adopted for short term goals will remain stuck in place, and investment plans put on hold. While APEC remains a relatively informal organization through which relationships of trust are built, it must allow for genuine dialogue at all levels.

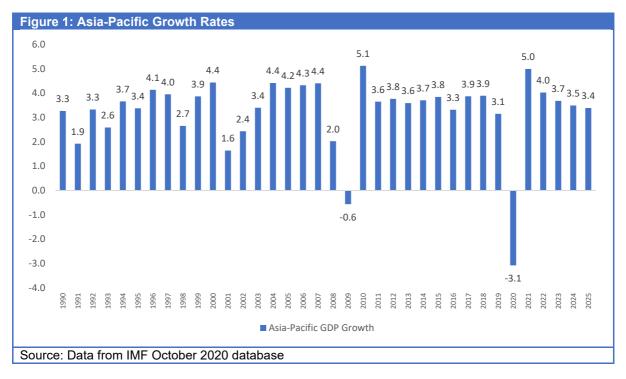
A central role that APEC has traditionally played is building understanding on international trade and support for the multilateral trading system. Our survey results identified slowing trade growth and rising trade protectionism as the highest risks to growth over the next 2 years after the immediate problems of the pandemic and jobs. We provide a special focus on challenges facing the World Trade Organization at the moment.

The Covid-19 crisis is accelerating change, economies will be taking different approaches in response to it. For example in Chapter 2 we address the different choices being taken to address the digital economy, APEC provides an essential platform to exchange views on the motivations behind those policy choices and the international implications that they often have.

Economic Outlook

The economic outlook for the Asia-Pacific¹ has improved somewhat in recent months, but recovery will be uneven and fragile as the global pandemic has deepened in some places. Asia-Pacific economies are expected to shrink by about 3.1 percent in 2020 – less than the 4.7 percent contraction forecast in July's State of the Region Report: Impact of the Covid-19 Crisis. Growth of 5 percent is now expected next year (see Figure 1). Growth in the Asia-Pacific is then expected to decline towards 3.5% in subsequent years.

¹ The definition of Asia-Pacific in this report is broad, including the members of APEC, PECC and the East Asia Summit.



The reasons for the improved 2020 picture are China's return to growth (it reported 4.9 percent expansion for the third quarter) and the less severe-than-expected downturns in several advanced economies.² However, achieving significant and sustainable gains is contingent on reduced global volatility and on multilateral cooperation – which has been sorely lacking - to contain the global pandemic.

While the regional economy is coming out of the depths it fell to in the first half of 2020, the cost of the pandemic in terms of lives, sickness, livelihoods, and businesses is huge. Complicating matters, the Covid-19 crisis hit at a time the region was already facing an array of challenges. Among those spelled out last year in PECC's task force report on a post-2020 vision for the region were:³

- Urgent questions about the quality and sustainability of economic growth;
- Growing concerns about increasing inequalities in income and wealth distribution;
- Existential challenges of environmental sustainability and climate change; and
- Rapid technological change with the potential to both contribute to an acceleration of the spread of prosperity, but also to intensify social strains and tendencies toward fragmentation

These challenges have led to growing skepticism in some sections of Asia-Pacific societies toward the value of openness and interconnectedness. That undermines political support for regional economic cooperation, which in turn has complicated joint efforts to tackle Covid-19. This update will address some related concerns in dealing with the crisis as well as medium to longer-term issues. This agenda for cooperation includes restoring a sense of confidence in the future, that involves responding to the issues that had already beset the region before Covid-19 upended the world.

Big gains, big challenges

For a quarter of a century, regional economic integration and indeed growth have been driven by the vision set by APEC leaders when they first met in Blake Island in 1993 and then in Bogor in 1994 and agreed to pursue the goal of:

"free and open trade and investment in the Asia-Pacific no later than the year 2020."

Given the manifold challenges facing the region and world today, it is worth remembering that the commitment to openness was not an 'add on' but was, at the time, central to APEC's vision. Leaders also pledged that:

² The forecasts contained here are largely based on the International Monetary Fund's October World Economic Outlook

³ https://www.pecc.org/resources/publications/regional-cooperation-1/2608-pecc-apec-2020-vision

"our people share the benefits of economic growth, improve education and training, link our economies through advances in telecommunications and transportation, and use our resources sustainably."

Such a vision is once again required against a background of fragile relationships and tenuous commitments to multilateral principles. The gains that the region has made in the pursuit of this vision have been impressive, average incomes rose from USD 10,258 in 1990 to USD 22,000 in 2017. In 1990, the highest per capita GDP in the region was more than 58 times the lowest; by 2017, this was down to 22 times.⁴

Even though the emerging economies now account for about 43 percent of regional GDP in current USD terms, over the next 5 years, they are expected to account for as much as 73 percent of the region's growth. This process was recognized by APEC leaders in Bogor when they stated:

"the narrowing gap in the stages of development among the Asia-Pacific economies will benefit all members and promote the attainment of Asia-Pacific economic progress as a whole."

The point is that the narrowing creates benefits for all members. Such a commitment to openness remains critical to the region's future and the delivery of shared benefits that is in APEC's DNA. On this platform we build other suggestion for cooperation. Over the period, annualized growth of consumption expenditure for emerging economies has been growing at about twice the rate of that of the region's advanced economies. A shift towards a greater role of domestic demand in driving growth has been a long-term trend in the region and an important part of rebalancing growth after the Global Financial Crisis. This is to do with longer term demographic trends, for example in 2019, McKinsey estimated that there "soon" would be about 3 billion Asian middle-class consumers.⁵ The impact of the Covid-19 crisis may slow that trend temporarily but in the longer term, the trend remains important, based on solid demographics and it will be an important changing structural feature of the Asia-Pacific economy.

The mutual benefits of this process is likely to change as the nature of flows change, from traditional goods to GVC networks to greater trade in services. APEC has begun to address these issues through its work on services and the digital economy. However, as with the earlier phase of the region's liberalization, much of the reform that took place was seen as mutually beneficial – these were individual action plans, rather than negotiations. APEC provided a confidence building platform, and assurance that others were moving in the same direction.

Stimulus Measures

To counteract the supply and demand shocks associated with COVID-19, governments across the region have been implementing monetary and fiscal stimulus measures. These have prevented an economic freefall, saved millions of jobs and forestalled the possibility of a financial crisis. As seen in Figure 4, the percentage of stimulus has varied from economy to economy, from less than 1 percent to more than 20 percent of GDP.

In 2020, Asia-Pacific economies have implemented combined stimulus measures worth about US\$6.0 trillion, or 11 percent of GDP and about half of all global stimulus.⁶ This does not include central bank funding nor support from what the IMF calls 'below the line' measures - loans and equity injections. Other examples have included easing insolvency requirements, arranging rent and bank loan reductions or repayment deferrals.⁷ In spite of the massive stimulus, there remain deep concerns in financial markets about the trajectory of growth and jobs.⁸

Overall government expenditure this year as a percentage of GDP is expected to increase from 33 percent to a record high 40.6 percent, according to calculations based on IMF data. (Figure 5) This is significantly larger than the increase following the GFC in 2009.

⁴ https://www.apec.org/Publications/2019/05/APEC-Regional-Trends-Analysis---APEC-at-30

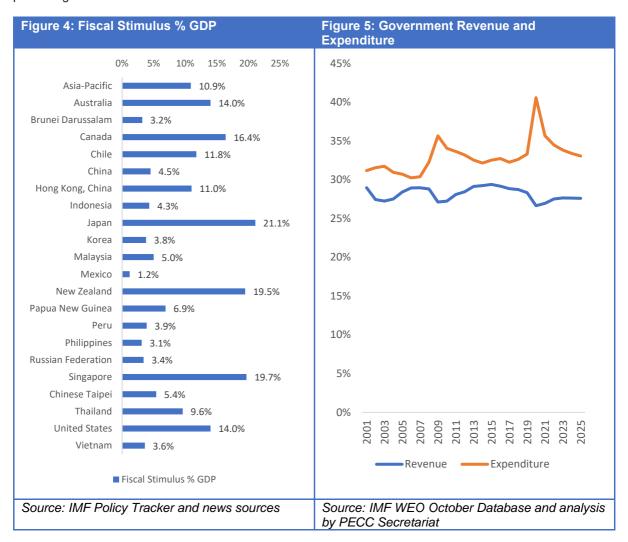
⁵ https://www.mckinsey.com/featured-insights/asia-pacific/asias-future-is-now

⁶ https://www.imf.org/en/News/Articles/2020/10/06/sp100620-the-long-ascent-overcoming-the-crisis-and-building-a-more-resilient-economy

⁷Fiscal Monitor April 2020, "Policies to Support People During the COVID-19 Pandemic", accessed on 7 July, 2020, https://www.imf.org/en/Publications/FM/Issues/2020/04/06/fiscal-monitor-april-2020

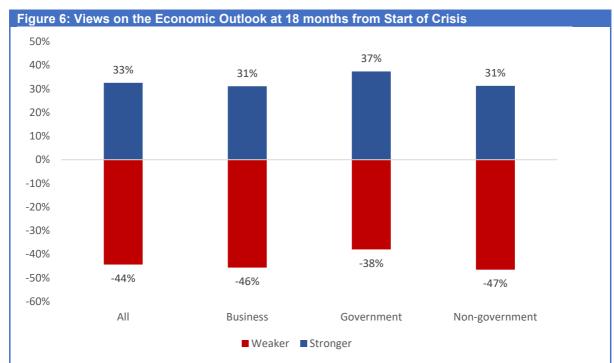
⁸ Michelle Jamrisko and Gregor Stuart Hunter, "When \$8 Trillion in Global Fiscal Stimulus Still Isn't Enough", Accessed on 1 May 2020, https://www.bloombergquint.com/china/when-8-trillion-in-global-fiscal-stimulus-still-isn-t-enough

Unwinding this year's massive increase in government expenditure will involve difficult choices. The current forecasts assume that regional government expenditure in 2021 will drop from 40.6 to 35.7 percent of GDP. Expectations are that revenue will decline by 2 percentage points this year and barely increase as a percentage of GDP in 2021.



As important as stimulus measures continue to be, economies cannot rely on them indefinitely. Growth is the answer to this challenge, and a coherent framework for growth that provides a sense of direction will be important to managing the transition.

PECC's survey in May showed divisions on timing of a sustainable recovery: 46 percent of business respondents still expected growth to be weaker 18 months on from the start of the crisis compared to 31 percent who expected stronger growth (Figure 6). This does not bode well for a sustainable recovery, especially as stimulus measures are withdrawn.



Source: State of the Region Survey on Covid-19 Crisis. Question: Please give an assessment of the impact the COVID-19 crisis will have on your economy over the following time periods compared to last year.

Impact on Income Inequality

Covid-19 is impoverishing many people. World Bank estimates suggest the number in extreme poverty (living on less than US\$1.90 a day) will increase from 595 million – a number contingent on a relatively swift recovery -- to between 684 million and 712 million. Should the worst-case scenario materialize, the pandemic will wipe out all poverty reduction achievements over the past 5 years. The Covid-19 crisis is already having a clear impact on global ambitions to reduce poverty and efforts to make growth more inclusive.

This exacerbates income inequality in both advanced and emerging economies. The United Nations reports that "income and wealth are increasingly concentrated at the top. The share of income going to the richest 1 per cent of the population increased in 59 out of 100 [economies] with data from 1990 to 2015." While the best way to increase incomes is through increased productivity, the pandemic has come after a long broad-based slowdown in productivity growth following the Global Financial Crisis. A report by the World Bank argues that a pro-active policy approach is needed to boost productivity (and incomes) to facilitate investment in human capital. ¹¹

Amongst the Bank's recommendations are on-the-job training; upgraded management capabilities; increased exposure of firms to international trade and foreign investment; and enabling the reallocation of resources toward more productive sectors. Of concern are mobility restrictions that slow the reallocation of workers from low-productivity firms and sectors to higher-productivity ones. Often these involved geographic relocation from rural to urban areas – the pandemic may constrain this mechanism.

Deepening inequality also lowers overall growth rates, the OECD estimates that between 1990 and 2010, rising levels of income inequality reduced growth rates for some advanced economies by as much as one-fifth. Therefore, there is strong incentive for governments in this low growth environment to address these issues.

⁹ https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty. We also note that in some economies in which social security systems have been deployed in stimulus packages then poverty rates could fall: see for example the case of the United States in https://www.economist.com/united-states/2020/07/06/americas-huge-stimulus-is-having-surprising-effects-on-the-poor

¹⁰ https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/02/World-Social-Report2020-FullReport.pdf ¹¹ World Bank, Global Productivity: Trends, Drivers, and Policies, 2020:

https://www.worldbank.org/en/research/publication/global-productivity

¹² Federico Cingano, Trends in Income Inequality and its Impact on Economic Growth, OECD, 2014.

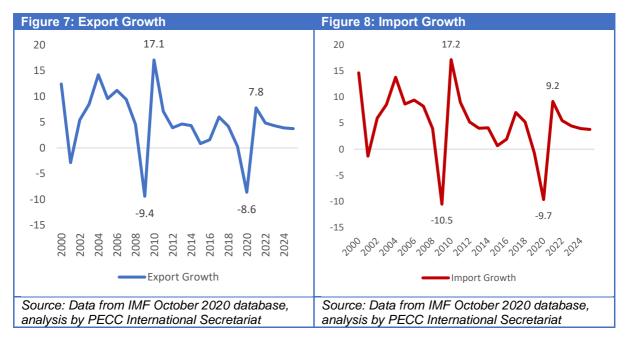
The region's governments have responded to the pandemic with unprecedented fiscal stimulus packages. The World Bank's report on East Asia and the Pacific Economic Update suggests that some:

"systems of taxes and transfers do not worsen inequality, but they have had relatively little effect on mitigating it....(i)n parallel, there is of course need for expenditure reform, including of subsidies that are not socially desirable."

There needs to be a deeper discussion about fiscal and social reforms. Some of these issues are not necessarily best suited to regional institutions such as APEC, but many are at least complementary to and supportive of APEC's goals.

As we argue below, responding to the crisis, and capturing the benefits of cooperation in doing so, is more effective when there is a broad-based of support for an international orientation and recognition of the value of integration. The rise in inequality makes this more difficult to achieve. It risks the creation of disillusionment with an open regime. It creates the apparent basis for an argument to move in the opposite direction, providing an opening for protectionist policies and special interests. Anticipation of this response, and the presentation of practical illustration of the value of openness will be important, not just for stability, but also long-term growth as argued. Communities like those of the APEC leaders and officials with common long-term shared interests have a key role to play in this.

The External Sector



Asia-Pacific exports of goods and services are expected to fall 8.6 percent this year and rebound by 7.8 percent in 2021 (Figure 7). Imports are expected to drop 9.7 percent in 2020 and then grow by 9.2 percent (Figure 8). Notably, the rebound is markedly less sharp than the recovery following the Global Financial Crisis. The IMF said

"Subdued trade volumes also reflect, in part, possible shifts in supply chains as firms reshore production to reduce perceived vulnerabilities from reliance on foreign producers... foreign direct investment flows as a share of global GDP are expected to remain well below their levels of the pre-pandemic decade".

Moreover, as we discussed in our previous report, protectionism and slowing trade growth have been regarded as risks to growth in our annual survey for a number of years. Their relative importance has also increased over time. As outlined in the sidebar, the multilateral trading system is faced with a number of challenges. Responding to these is a necessary part of the portfolio of policies to restore confidence and stability for a sustainable recovery.

11

Current WTO Challenges and APEC's Role Jonathan Fried

The Pacific Economic Cooperation Council's survey on the impact of Covid-19 identified slowing trade growth and rising trade protectionism as the highest risks to growth over the next 2 years after the immediate problems of the pandemic and jobs. This section addresses the challenges facing the World Trade Organization (WTO) and the role that regional cooperation can place in addressing those challenges.

The WTO, established in 1994, builds on the collective commitment first made in 1947 in the General Agreement on Tariffs and Trade to pursue "the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce" with a view to raising employment and standards of living throughout the world. Through a corpus of some 60 agreements, members together established mechanisms for advancing this goal.

First, in successive rounds of **multilateral trade negotiations**, the WTO has been remarkably successful in reducing tariffs, from around 22% in 1947 to around 5% by the end of the Uruguay Round when the WTO was established, in expanding disciplines on non-tariff measures such as technical barriers to trade and sanitary and phytosanitary regulation, in circumscribing subsidies, including on agriculture, that otherwise distort production and trade, and in adding rules on intellectual property, trade in services, and trade-related investment measures.

Secondly, through its councils and committees and its Trade Policy Review Mechanism, the WTO has maintained vigorous **surveillance and oversight** of member compliance with the rules. Thirdly, the **dispute settlement** body and its appellate mechanism have been widely used, with over 600 cases filed since 1994, and decisions largely respected and implemented.

The WTO has also played a key role in **technical assistance and capacity building** for developing economies, often in cooperation with bilateral donors and other international organizations. But on each of these fronts, stresses have grown, and many consider the multilateral rules-based trading system to be at risk.

- Multilateral negotiations under the Doha Development Agenda have been stalled for some years. Only one agreement, on Trade Facilitation, has been concluded since 1994. Further, it is increasingly evident that current rules are inadequate to respond to business needs in the 21st Century, as they do not address digital trade, subsidies through state-owned entities, investment disciplines, or such social dimensions as environment, labor or traceability. And the rules have little that promote broader participation in international trade by MSMEs. With these gaps, unilateral measures and responses have become more prevalent, and preferential trade agreements have proliferated.
- Monitoring is less effective or transparent than intended, as notifications are often years out-ofdate and members fail to heed advice given in oversight sessions.
- Given sharp differences of views on the role of the Appellate Body and of jurisprudence, members are at an impasse regarding the dispute settlement system.
- Despite continuing technical assistance, differences over special and differential treatment for developing economies remain.
- Government responses to the Covid crisis, including export restrictions on medical equipment and supplies, pharmaceuticals, and agricultural products, have constrained the world's ability to get these goods to those who need it.

In this context, APEC can be a significant part of the solution.

Most importantly, APEC's tradition of maintaining open and candid discussion at both the officials' and ministerial levels, and of meaningful engagement with relevant stakeholders through ABAC and PECC, and ASEAN and PIF as sub-regional official observers, is indispensable to building consensus among member economies and beyond. All members should undertake proactive efforts to ensure meetings of Senior Officials, the Committee on Trade and Investment and the Market Access Group, Ministers Responsible for Trade, and Leaders are structured in a manner to foster such discussion.

APEC's track record in leading by example can move **multilateral negotiations** forward. Its endorsement of efforts to develop a zero-tariff Information Technology Agreement in 1996, and facilitating consensus including between the US and China in 2014 to expand its coverage, led to plurilateral agreement extended to all WTO members on a most-favored-nation basis on a range of products. Similarly, APEC's pursuit of free trade on environmental goods triggered multilateral discussions at the WTO, still ongoing, and it maintains reporting on APEC's list of such goods.

Looking forward, building on APEC's non-binding investment principles and Investment Facilitation Action Plan, APEC members can show the way to global agreement. In response to Covid, the APEC Trade Ministers' commitment "to ensure that emergency measures designed to tackle COVID-19 are targeted, proportionate, transparent, temporary, do not create unnecessary barriers to trade or disruption to global supply chains, and are consistent with WTO rules", and its Declaration on facilitating the movement of essential goods, is itself a basis for a WTO commitment. As early as 1998, when APEC produced a blueprint on e-commerce, APEC has promoted broader agreement on multiple dimensions of the digital economy. In each of these areas, work can be accelerated and taken to international tables. And APEC members have always considered regional and multilateral trade agreements to be complementary, not competitive. Its Roadmap for APEC's Contribution to the Realization of the Free Trade Area of Asia-Pacific (FTAAP) provides a strong foundation for pursuing further liberalization on multiple fronts.

APEC's **monitoring and surveillance** of members' trade-related policies in a range of fields contributes importantly to transparency and ultimately to compliance with the rules-based trade regime.

One specific value proposition that APEC adds is its dialogue on WTO-plus provisions in regional trade agreements. These have covered such difficult issues as those on state-owned enterprises, SMEs and gender. These are issues where bridges and deeper understandings need to be built if progress is to be made at the WTO. APEC's non-binding nature and emphasis on stakeholder engagement make it an ideal forum for developing that understanding without prejudice to negotiating positions.

More generally, APEC's ongoing attention to MSMEs, accounting for 90 per cent of all businesses in the region, can point the way to how best to modernize WTO rules to be more responsive to their needs. Similarly, the work of the Committee on Trade and Investment and the Economic Committee provides important evidence-based analysis of the relation between trade and investment, competition, and taxation, and the importance of good economic governance at home, including structural adjustment.

On **dispute settlement**, APEC's Expert's Group on Dispute Mediation in its report to the Committee on Trade and Investment in 1996 recommended a framework for alternative dispute resolution¹³, providing the basis for APEC publishing a Guide to arbitration and dispute resolution in APEC economies in 1997, updated in 1999.¹⁴ Many of the principles have been put into practice: today, with the impasse in Geneva, several APEC members have joined an initiative that creates a Multi-Party Interim Arrangement for appeals from WTO panels, and in at least two, one involving Korea and the US, and the other, between Indonesia and Vietnam, the disputing APEC members agreed to consider a panel report binding without appeal¹⁵. APEC members should reinvigorate discussion by reconvening an Experts' Group.

Finally, **capacity-building and promoting inclusion** remains a core APEC competence, further to APEC's Action Agenda on Advancing Economic, Financial and Social Inclusion, and should continue to be supported by member economies. More broadly, some APEC members are leading by example in foregoing claims of special and differential treatment, better aligning their level of obligation with their level of development, a practice worthy of being adopted by other advanced emerging economies.

Jonathan Fried served as coordinator for international economic relations at Global Affairs Canada until August 2020. From 2017 to early 2020 he was Canada's G20 Sherpa, from 2012-2017, he served as Canada's ambassador and permanent representative to the World Trade Organization (WTO), where he played a key role in multilateral trade negotiations, including as chair of the WTO's General Council in

¹⁵ https://www.wto.org/english/tratop e/dispu e/cases e/ds488 e.htm; WTO, Indonesia – Safeguard on Iron or Steel Products, Understanding Between Indonesia and Vietnam Regarding Procedures Under arts 21 and 22 of the DSU (27 March 2019) WT/DS496/14, para 7; WTO, Indonesia – Safeguard on Iron or Steel Products, Understanding Between Indonesia and Chinese Taipei Regarding Procedures Under arts 21 and 22 of the DSU (15 April 2019) WT/DS490/13, para 7, see also https://tradebetablog.wordpress.com/2019/08/21/bother-at-wto-court/#noappeal

¹³Dispute Mediation Experts' Group Reports on a Voluntary Consultative Dispute Mediation Service, 35 I.L.M. 1102 (1996); see also the 1998 Committee on Trade and Investment Annual Report to Ministers, APEC#98-CT-01.1
¹⁴ APEC#99-CT-03.2

2014 and chair of the Dispute Settlement Body in 2013. He was Canada's representative to the APEC Vision Group. The views stated here are his own.

The Covid Context for Regional Economic Integration

Previous editions of this report have laid out the potential economic benefits of region-wide economic integration, which were in the order of US\$2 trillion annually. ¹⁶ These gains would be shared more widely in the region depending on the breadth of the membership and the quality of the agreement. Given the need for growth boosting initiatives after the Covid-19 crisis, a fresh look at the role that trade integration can play in boosting growth needs to be taken.

More recent estimates focus on more specific arrangements under negotiation. For example, work on the economic benefits of Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) estimates not only the potential economic gains for member economies under normal 'business as before' circumstances but also should various trade tensions continue.¹⁷ With business as before circumstances, the CPTPP and RCEP15 agreements will raise annual global incomes in 2030 by US\$147 billion and US\$186 billion respectively. Should the trade war continue, global incomes in 2030 will be reduced by US\$301 billion, with the trade agreements offsetting that loss by US\$121 billion for the CPTPP and RCEP by US\$209. Should India rejoin the RCEP the benefits (or offsetting of losses) become larger.

In spite of the entry into force of the CPTPP in 2018 and the likely signing of the RCEP in November 2020, progress towards more extensive integration in the region is challenging because of ongoing trade tensions between the region's two largest economies, the United States and China, notwithstanding the Phase 1 Trade Deal between them. In the immediate term, the pathway might instead involve the strengthening of the existing agreements, for example deepening commitments in RCEP and extending membership of the CPTPP.

Since the entry into force of the CPTPP several APEC economies have indicated their interest in joining the agreement, notably but not limited to Thailand¹⁸. Interestingly, from outside of the region, the United Kingdom has also initiated talks with CPTPP members.¹⁹ There is also further positive momentum on the CPTPP with Chinese Premier Li Keiqiang stating that "China has a positive and open attitude toward joining the CPTPP."²⁰ It is worth noting that at the annual China International Fair for Trade in Services President Xi Jinping's announced that China would "will continue to work on a negative list system for managing cross-border services trade" which would be a big step towards being able to join an agreement such as the CPTPP.

A major question for the next US administration, regardless of the winner of the November election, is the US position with regards to the CPTPP? A paper by the Asia Society Policy Institute laid out four options:

- Option 1: Returning to the Original TPP
- Option 2: Acceding to the CPTPP
- Option 3: Renegotiating the CPTPP
- Option 4: Pursuing Interim Sectoral Deals

These options are of interest to all current CPTPP members, who are also part of APEC, which thereby has an important role as a platform for engagement between them on issues of mutual concern and which impede more extensive regional integration. This contribution in a non-binding forum has long been APEC's core, but often discounted, strength.

Returning to the question of the paths to region-wide integration, respondents in the PECC 2019 State of the Region report preferred the option of convergence in terms of product coverage and level of liberalization in various regional agreements. How to do so, and to how to maintain engagement with trading partners in the rest of the word, is another topic that APEC might usefully examine in the coming years.

¹⁶ These benefits refer to modelling of a scenario of the Free Trade Area of the Asia-Pacific (FTAAP). See https://www.pecc.org/state-of-the-region-report-2014

¹⁷ https://www.piie.com/system/files/documents/wp20-9.pdf

¹⁸ https://www.reuters.com/article/us-cptpp-thailand-idUSKBN23I1PM

¹⁹ https://www.gov.uk/government/news/uk-takes-major-step-towards-membership-of-trans-pacific-free-trade-area

²⁰ http://english.www.gov.cn/premier/news/202005/29/content_WS5ed058d2c6d0b3f0e9498f21.html

International Travel

As this update is getting prepared, the resumption of some flights in the region through travel "bubbles" and "green lanes" was underway, a very welcome development. But the overall picture for international travel remained dire. An October update by the International Civil Aviation Organization saw a fall in air passengers (both international and domestic) of between 59% to 62% in 2020, and a 61% drop in revenue.²¹ The loss in tourism revenue globally this year is estimated at between US\$910 billion and US\$1.17 trillion, and tens of millions of jobs on the industry had been lost.

In our previous report, we suggested that a critical part of the transition to the post-crisis period is rebuilding confidence in international travel. Progress in making arrangements for reopening travel, like between Singapore and Hong Kong as well as Singapore and Jakarta, shows increased cooperation by governments and provides confidence more travel routes will reopen. However, as the pandemic has not been contained, there is a need to consider more ways of rebooting international travel. The International Chamber of Commerce (ICC), representing 45 million companies, has issued a roadmap to restore travel, which includes:

- 1) Recognized standards for testing.
- 2) Accredited testing facilities.
- A standard platform for holding test certificates.²²

An important underlying feature of this roadmap is systems that facilitate mutual recognition and trust. As more economies greatly reduce Covid-19 infection rates, the creation of more travel "bubbles" is possible.²³ The development of protocols that encourage travel is a worthwhile agenda for regional cooperation.

Investment

Last year's State of the Region report focused on the 'troubling characteristic' of the post-GFC period of an 'inability to move out of the stimulus stance', noting that capital expenditure had remained disappointing. Even prior to the Covid-19 crisis, expectations had been for an overall contraction in capital expenditure over 2020 and 2021.²⁴

Significant cuts to corporate capital expenditure in reaction to Covid-19 range are likely, and as much as 80 percent according to a McKinsey survey. ²⁵ Doing so frees up cash to deal with the very uncertain business environment. After the primary problem of determining expenditure cuts, the second most cited challenge cited by McKinsey was the "Limited fact base to make decisions to defer or cut". ²⁶ A framework to help businesses and consumers make forward-looking decisions has value in this context.

The IMF argues that

"the recovery of private sector activity is being constrained by weakened private sector balance sheets, losses in human capital because of unemployment, and skill mismatches as demand shifts from high-contact sectors to those that permit social distancing. Public investment can encourage investment from businesses that might otherwise postpone their hiring and investment plans."²⁷

Further, the IMF contends that the pandemic

"creates an urgent need for smaller, shorter-duration projects, not only in the health care sector, but also to facilitate social distancing in work and school activities, on transportation, and in public spaces. Such projects include both physical adaptation (for example, greater spacing and transparent barriers) and greater access to digital technologies'

However, the IMF also asserts that public investment will be lower in 2020 than in 2019 in 72 out of 109 emerging markets and low-income developing economies. There is thus an urgent need for governments to work with the business community in rolling out these projects.

²¹ https://www.icao.int/sustainability/Documents/COVID-19/ICAO Coronavirus Econ Impact.pdf

²² https://iccwbo.org/content/uploads/sites/3/2020/10/tourism-ministers-letter-061020.pdf

²³ https://www.mot.gov.sg/News-Centre/news/detail/singapore-and-hong-kong-reach-in-principle-agreement-to-establish-bilateral-air-travel-bubble

²⁴ https://www.pecc.org/state-of-the-region-reports/282-2019-2020/847-chapter-1-asia-pacific-economic-outlook

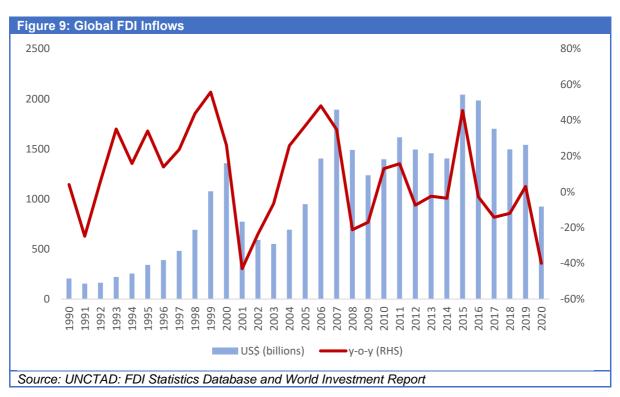
²⁵ https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/resetting-capital-spending-in-the-wake-of-covid-19

²⁶ Ibid

²⁷ IMF Fiscal Monitor October 2020, Chapter 2 - Public Investment for the Recovery, https://www.imf.org/en/Publications/FM/Issues/2020/09/30/october-2020-fiscal-monitor

FDI Inflow Trends

UNCTAD's World Investment Report forecast a 40 percent drop in foreign direct investment (FDI) flows in 2020. This would bring global FDI inflows below US\$1 trillion for the first time since 2009 (Figure 9). The drastic drop in FDI in 2020 can be traced to the pandemic, though UNCTAD argues that FDI has also been reduced due to trade and investment restrictions.



For 2020, UNCTAD forecasts a 30 percent drop in greenfield investment and a 21 percent fall in cross-border mergers and acquisitions. These corporate activities are already badly affected by the significant demand shock and lockdowns, but adding policy uncertainty to this, as a result of concerns over rising protectionism, is likely to leave more money on the sidelines. Regimes applying to FDI have also tightened, as economies seek to constrain foreign takeovers of domestic enterprises affected by the crisis. International law firm Ashurst reports that:

'since the outbreak of the COVID-19 pandemic, certain jurisdictions have tightened their foreign investment regimes... More generally, whether or not specific changes have been introduced, we are likely to see a stricter application of foreign investment regimes for the duration of the current crisis, and potentially over the longer term." ²⁸

A prolonged shutdown of economic activities will discourage new investment, slows FDI from existing investors and possibly result in divestments. This could affect emerging economies that are highly dependent on foreign investors both for export-oriented industrial activity and in public-private partnership projects in infrastructure development (such as power generation plants and industrial parks).

Looking beyond the crisis, UNCTAD foresees twin pressures on the investment policy environment, as there could be greater use of restrictive policies but at the same time there is also likely to be competition for investment as part of economies' recovery plans. Platforms for multilateral cooperation for discussing investment policy then assume greater importance; in 2016, for example, G20 Leaders agreed to the Guiding Principles for Global Investment Policymaking, while APEC has longstanding Non-Binding Principles for Investment. These set a minimum benchmark for dialogue practice that could be taken further.

²⁸ https://www.ashurst.com/en/news-and-insights/legal-updates/global-foreign-investment-control-regimes---changes-in-light-of-covid-19/

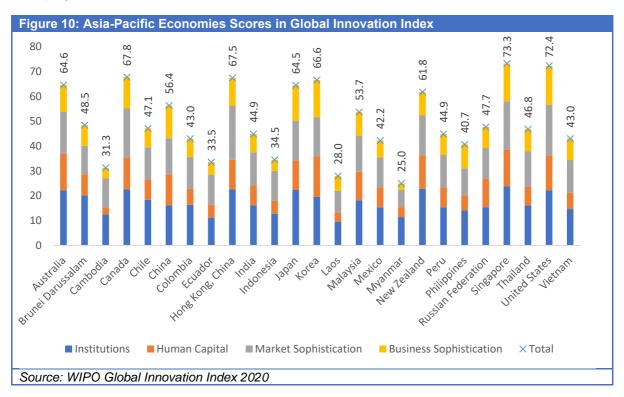
Digital sector

The picture for growth of the region's digital sector is mixed. World Intellectual Property Organization's World Innovation Index 2020 Report argues that compared to the period after the Global Financial Crisis

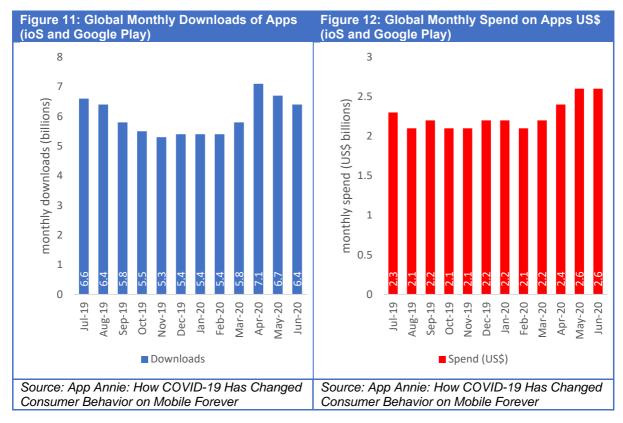
"...the good news is that the financial system is sound so far. The bad news is that money to fund innovative ventures is drying up. Rather than financing novel, small, and diverse start-ups, venture capitalists began focusing on so-called "mega-deals"—boosting a select number of large firms rather than giving fresh money to a broader base of start-ups."

The WIPO report point about venture capital targeting mega-deals is of concern for three reasons: small firms have been most damaged by the crisis; there are risks of growing concentration in the sector; and the pipeline for innovation can be damaged.

Figure 10 shows selected scores for WIPO's Global Innovation Index. There is significant heterogeneity across the region in and across the different sub-pillars that should indicate areas where each economy could progress.



Over the years, China, Vietnam, India, and the Philippines have gained the most in the index ranking and are now in the top 50. Given innovative growth is one of the pillars of APEC's growth strategy, initiatives that focus on improving performance in various dimensions of the index would be one way to improve the region's overall performance. However, understanding the reasons why the market prefers to invest in larger firms would be a key to channeling funding towards the MSME sector. This points to a need for regional economies to make improvements to the environment for innovation.



The Covid-19 crisis has intensified attention to returns to investment in telecoms infrastructure. GSMA, an industry grouping of more 400 companies reports that the mobile industry delivered a 7% improvement in download speeds during the pandemic, thanks to increased investment in mobile networks, which totaled US\$180 billion in 2019. A further US\$1.1 trillion is expected to be invested between 2020 and 2025. However, for these investments to materialize to close the coverage gap between those with high speed and reliable Internet and those without, the mobile industry argues that

"governments and regulators need to provide the best possible enabling environment by ensuring pro-investment and pro-innovation policies that reduce costs and uncertainty around spectrum allocation and assignments, remove obstacles to network deployment, and adopt international best practices on tax policy."²⁹

Some of these enabling policies for the digital economy are identified in WIPO's Global Innovation Index, others more specific to the telecoms sector are available elsewhere.

There are several reasons for the changed dynamic in investment in telecoms infrastructure. One is the onset of 5G technology, but a related cause is the acceleration of the use of digital technology caused by the Covid-19 crisis. Downloads of mobile applications exceeded 7.1 billion in April when global lockdowns were at a peak, and global expenditure on applications was over US\$2.6 billion.³⁰ (Figures 11 and 12). Importantly, these trends are likely to be sustained after the pandemic has gone, for example, 83% of those shopping online say they are likely to continue spending that way after social distancing restrictions are lifted, according to a study by Bain.³¹

Expectations that the tech sector will keep growing rapidly are drawing in more funds for investment. US private equity firm KKR recently raised over US\$13 billion for an Asia-focused fund, exceeding its US\$12.5 billion target. Likely investments will include the tech sector as well as consumer and manufacturing firms.³²

²⁹ 2020 Mobile Industry Impact Report: Sustainable Development Goals: https://www.gsma.com/betterfuture/2020sdgimpactreport/wp-content/uploads/2020/09/2020-Mobile-Industry-Impact-Report-SDGs.pdf

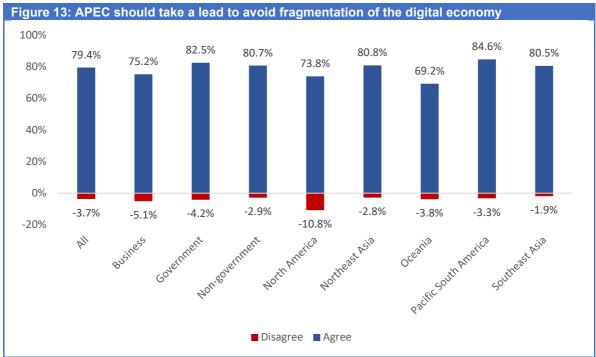
³⁰ https://www.appannie.com/en/insights/market-data/covid19-consumer-behavior-mobile/

³¹ https://www.bain.com/insights/how-covid-19-is-changing-southeast-asias-consumers/

³² https://www.reuters.com/article/us-kkr-asia-fundraising-idUSKBN1XH1RF

The allocation of resources towards more productive sectors faces specific policy challenges. As noted, the digital economy has been critical to enabling effective responses to the pandemic and will be an area of growth for the foreseeable future. However, a lack of regulatory coherence, continued constraints due to the pandemic, rising protectionism and uncertainty about the future of the WTO moratorium on electronic transmissions add up to an environment in which businesses may be unwilling to invest even if interest rates stay near zero.

Even before the Covid-19 crisis and the ramped-up demand for digital services, there were deep concerns about the increasing fragmentation of the digital economy. PECC's survey on the post-2020 vision for the region found extremely broad support across stakeholder groups and sub-regions for APEC to tackle that issue (Figure 13). Understanding why this is important for businesses and consumers alike is critical as well as the drivers of policies behind the fragmentation or the splinternet as it has become popularly known. Given the increased role of the digital economy in light of the Covid-19 crisis resolving those tensions takes on an even higher degree of importance. As discussed in detail in the next chapter, trade agreements are trying to grapple with this issue, but are they fit for purpose?

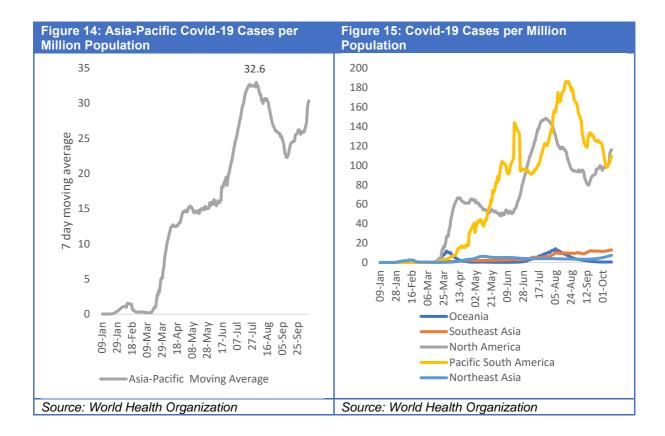


Source: PECC State of the Region Survey 2019

Question: Please indicate your level of agreement with the following statements regarding the digital economy.

The Evolution of the Pandemic

One key point in our earlier report was that assumptions for a global economic recovery were based on a belief the pandemic would ebb and containment measures would be loosened in the second half of 2020. Still, there were warnings a second or even third wave was possible. That risk has indeed materialized, though the prognosis for economic growth is largely better than earlier this year.



Looking at Asia-Pacific as a whole, the pandemic seemed to have reached a peak of 32.6 infections per million of the population in July before dropping dramatically through August and began to rise again in late September (Figure 14). However, a more detailed look at specific sub-regions and economies shows that infection rates for Oceania, Southeast Asia, and Northeast Asia are at a fraction of North America and Pacific South America levels (Figure 15), and within a sub-region like Southeast Asia, specific economies are faring much better than others

Analysts have been at pains to try to understand the differing performances battling the pandemic. World Bank analysis points out that East Asia and the Pacific sub-regions have, on average, employed more stringent mobility restrictions and done more testing. ³³ Their analysis points out that a more stringent lockdown policy has immediate effects in containing the virus while a "smart-containment" policy such as open testing is observed with a lag. Of equal importance but perhaps less well understood is an integrated policy approach:

- Containment
- Testing
- · Economic support for lost pay
- Information Campaigns

Without this package, it becomes difficult to gain the political support for policies over a sustained period.³⁴ These approaches have been developed through previous experience with pandemics. One of the variables that seems to distinguish more successful handling of a pandemic is a clear and strong information campaign. A deeper analysis of all of the policies – including how successfully they were implemented - will help future planners learn from the region's experience with Covid-19.

While there are naturally hopes that vaccines can be deployed quickly, the responses to PECC's survey show the ending of the lockdown was not seen as contingent on that one variable; indeed what was considered as most important was the medical capacity to deal with cases. A vaccine came third in the list, indicating a common view it cannot be available very rapidly.

³³ From Containment to Recovery: Economic Update for East Asia and the Pacific, October 2020, https://www.worldbank.org/en/region/eap/publication/east-asia-pacific-economic-update
³⁴ Ibid

The Wall Street Journal in October, in an article on how life was largely back to normal in much of Asia, quoted Ashish Jha, dean of the Brown University School of Public Health, as saying:

"If you can control the virus, you can get 95% of your life back ... In the U.S. and Europe, we wanted to get our lives back, so we acted as if the virus was under control. In Asia, they were not in denial. They understood they can have their lives back if they follow certain precautions."

To contain the spread of the pandemic, governments across the region and the world have implemented stringent lockdown policies that have curtailed economic activity, ranging from closing borders, closing schools, stay at home policies and reducing the size of public gatherings.

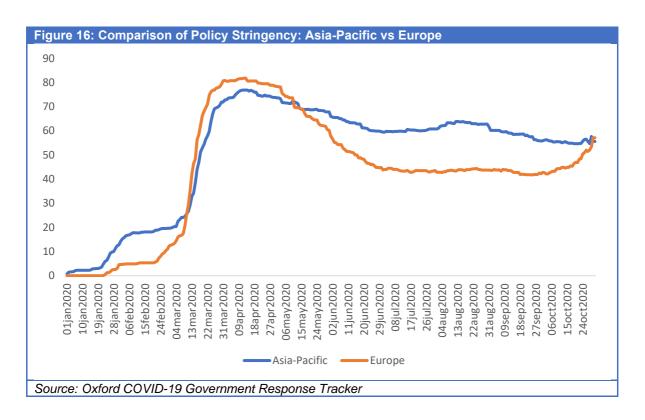


Figure 16 traces the average restrictiveness of those policies since the beginning of the year. The index tracks the level of government policies on school closures; workplace closing; cancelling public events; limits on private gatherings; closing of public transport; stay at home requirements; restrictions on internal movement between cities/regions and restrictions on international travel. As shown in Figure 16, the average level of 'stringency' for the Asia-Pacific and Europe since the beginning of the year. As seen in the chart, the level of policy stringency for both peaked in April but declined much faster for Europe. There is no guarantee that the stringency level will not rise again if infection rates increase, for example, parts of Europe have heightened lockdown measures such as imposing curfews and limiting gatherings due to rising infection rates. As seen in the chart the levels of policy stringency for Europe began to climb again at the end of October.

Vaccine development

In May, we asked the regional policy community to evaluate factors to consider for exiting lockdown conditions. The most important were related to medical factors the top 3 being: the ability of the medical system to cope with the number of infections; evidence that the number of infections was going down; and development of a vaccine (Figure 17).

The next step to resolution involves the distribution of vaccines but building the supply chains across multiple modes of transport is a challenge, with respect to the scale of the task and also the policy processes involved.

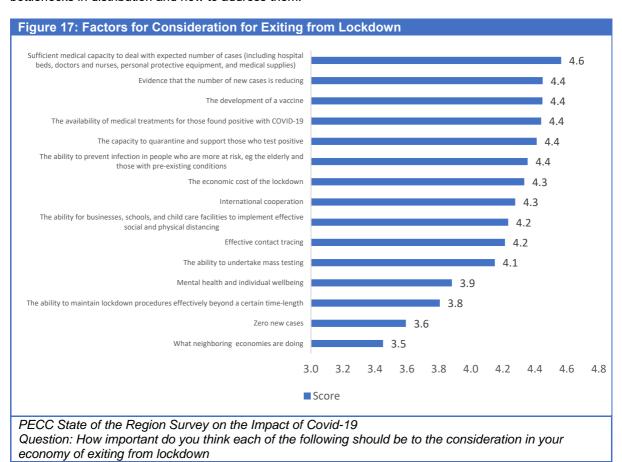
The WHO estimates that as much as half of vaccines are wasted globally every year because of temperature control, logistics and shipment-related issues.

The International Air Transport Association (IATA) estimates that providing a single dose to 7.8 billion people would fill 8,000 Boeing 747 cargo aircrafts. Dealing with these issues might get shipments to the borders of economies, but distributing vaccines to the billions who require them will be an enormous logistical and infrastructure challenge. DHL estimates that ensuring global coverage for 2 years would require 15 million deliveries in cooling boxes. Warehouses not designed for medical projects are now being used for medical products, which has led to damage due to inappropriate storage conditions. Different vaccines also require different storage protocols, one of the important factors being storage at temperatures ranging between minus 18°C to minus 80°C. Moving the "last mile" in places where infrastructure is lacking and it is the hardest to meet requirements for special equipment and training 6. It is estimated that supply chains account for nearly 25 percent of pharmaceutical costs and more than 40 percent of medical-device costs 7.

On top of these physical issues, customs clearance matters, such as supplier certification, have become a problem. Lessons to be learnt here include the need for greater emphasis on reaching agreement on the equivalence of certification processes. Doing so is a longer-term project to build trust among regulators.

APEC's Alliance for Supply Chain Connectivity, which engages the private sector, could be a useful platform for identifying chokepoints in the delivery of vaccines around the region. Before the pandemic, the APEC alliance already had discussed some potential technological solutions to the temperature storage issues that vaccination transportation will pose and the customs-clearance issues that technology will face.

In summary, the development of a vaccine needs to be accompanied by rollout plans that identify potential bottlenecks in distribution and how to address them.



³⁵³⁵ https://www.theguardian.com/world/2020/sep/10/we-have-too-few-planes-to-deliver-any-covid-19-vaccine-warns-aviation-

³⁶ https://www.dhl.com/global-en/home/insights-and-innovation/thought-leadership/white-papers/delivering-pandemicresilience.html

resilience.html ³⁷ http://mddb.apec.org/Documents/2020/CTI/A2C2/20_cti_a2c2_009.pdf

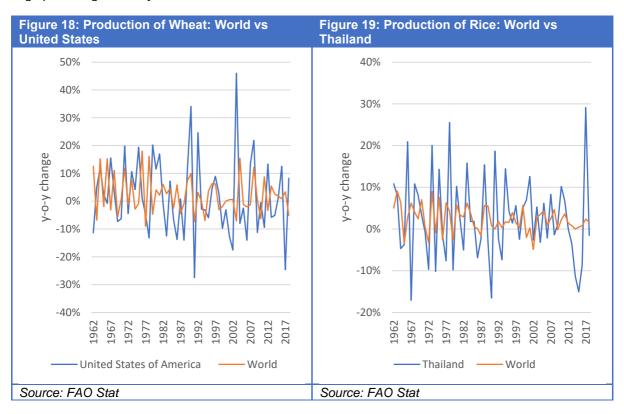
Information Sharing and Minimizing Supply Chain Disruptions

One of the recommendations in PECC's earlier report was that APEC members should hold a Public-Private Dialogue to explore the creation of a Medical Equipment Market Information System using the G20 Agricultural Market Information System (AMIS). Meanwhile, APEC Trade Ministers agreed to the Declaration on Facilitating the Movement of Essential Goods, in which their economies committed to working together to facilitate the flow of essential goods.

AMIS was a response to the food price crises in 2008 and 2010. It was designed to improve market information about existing stocks. Based on existing structures and resources to avoid increasing costs and duplication of efforts, it consists of three organs:

- The Global Food Market Information Group
- The Rapid Response Forum; and
- The Secretariat

The underlying premise of AMIS is that fluctuations in output at the global level are far smaller than those at the regional or single-economy level. Changes in one region are offset in another. When the global trading system is working, the impact on prices and on volumes is distributed across the world. This is illustrated in Figures 18 and 19 where the variation of the world production of wheat and rice is far less than that in a major producer of each (the United States and Thailand, respectively). Its purpose is therefore to share information across regions, and to avoid inefficient responses to shocks in any one region that might in turn worsen the global situation. An illustration might be the imposition of export quotas following a drought in a large producing economy.



As an evaluation of the funding for AMIS provided by the World Bank points out:

"[t]he turnaround time to design and put together an initiative in response to the food crisis of 2007–2008 was limited - a few months. This led to a situation where the organizations that agreed to form the AMIS Secretariat did not consider who would use AMIS' outputs and what were the needs of participating countries, in particular the non-G20 ones and more broadly, the entirety of its users." 38

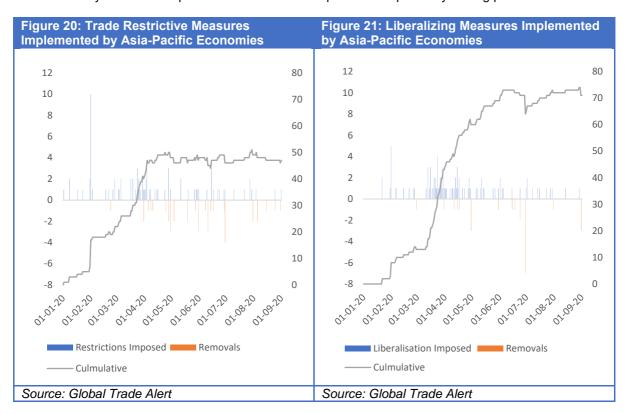
_

³⁸ http://www.amis-outlook.org/fileadmin/user upload/amis/docs/resources/WB%20evaluation.pdf

Can this model be translated to medical products, where we also saw the imposition of export controls in anticipation of local shortages? Production of medical equipment is not as vulnerable as crops to the vicissitudes of weather, and as in the Covid-19 case, the changes are more likely to come on the demand side. Even so, the value of an information system remains, at least in principle.

To illustrate this point, Figures 20 and 21 are based on data gathered by the Global Trade Alert, the European University Institute and the World Bank to track trade policy measures taken in response to the Covid-19 pandemic. They show the changes in policy for exports and imports of medical and food products during 2020.³⁹

The problem, evident in Figure 20, is that the lack of information or at least opacity in medical goods supply markets can potentially (and indeed did) lead to poor decision-making. The closure of borders as well as factories constrained international production and trade in medical supplies, while the pandemic led to a massive surge in demand. Fear of no access to products led to stockpiling, which exacerbated the issue. This spurred different policy measures that restricted trade because of a lack of confidence in international markets to supply. At the same time economies were also liberalizing trade – as shown in Figure 21, these include trade facilitation measures to expedite the processing of essential products through customs. However, as "Evenett and Winters (2020) have recently observed, "the benefits derived from lowering import barriers on medical products and medicines during this pandemic are reduced if there is little available to buy at affordable prices as a result of the export bans imposed by trading partners.⁴⁰"



The original G20 mandate emphasized the key role the private sector plays. Compared to food products, the medical products value chain is populated by a smaller number of large producers. Data from the WTO suggests that, at least for finished products, the top 10 exporters of medical products account for 74 percent of world exports. The model, however, involves the sharing of information along the value chain, which may be constrained by private sector views on the commercial value of that data.

Managing a system like AMIS in this sector means addressing the technical difficulties of dealing with an even more heterogenous set of products. A further challenge for medical products is the complex nature of the value chain. According to Harvard Business Review, for those products, managing a system such as that proposed involves an effort to:

25

³⁹ The problem identified by this initiative is that *'governments often announce to the media changes in their trade policies before publishing official decrees and implementing regulations and in advance of notifying the World Trade Organization.* Moreover, the total of trade restrictions picked up by this initiative are significantly higher than those reported to the WTO. ⁴⁰ Cited in Richard E. Baldwin and Simon J. Evenett, COVID-19 and Trade Policy: Why Turning Inward Won't Work https://www.globaltradealert.org/reports/download/53

"lay the groundwork by doing advanced planning, analyzing markets to assess the global availability of PPE and ventilator components, and creating sourcing plans for every key need that might arise. To do this kind of planning, it must have abundant, dependable, real-time information from a broad array of sectors on the status of supplies, pandemics, terrorist events, and other unexpected disruptions. And it must be able to validate and integrate this information."

Doing so may involve going down into second to third tier suppliers. The world now has a better understanding of what happens during a demand surge, and we need to develop the same visibility on the supply side.

Recognizing the differences between food and medicine, the PECC recommendation was to start with a public-private dialogue on the practical question of making this idea work. This is generally a well-tried and utilized Asia-Pacific approach to addressing problems.

There is support for this effort. In PECC's survey, information on stockpiles of medical supplies was ranked 8th among priorities for regional cooperation. Topping the list were the sharing of pandemic preparedness practices, development of a vaccine, trade facilitation on essential products and the removal of export restrictions on essential products, which survey participants most often rated "very important". Of activities considered of the second order and "important", cooperation on medical supply stockpiles was the top priority.

We have made the case for consideration of an information system for medical products, the design of which could be guided by a public-private dialogue. Even if such an initiative proceeded, some governments may still choose, or be unable, to resist domestic pressure to subsidize production, or otherwise tailor procurement that would favor domestic producers. There are, however, constraints on these responses, since in either case, these actions would run into criticism from trading partners and possible disputes that could be taken to the WTO. The defense may be to argue that a special situation exists under Article XX of the GATT, necessary to protect human life or even Article XXI, a security exemption. In this situation, there is also value in a dialogue on the application of these articles.

In summary, there are better solutions than subsidies or distorted procurement regimes that favor domestic suppliers, and information sharing across economies may be a valuable option. The purpose of exploring this option is to:

- a) Provide the same if not equal levels of security
- b) Reduce costs for consumers
- c) Require less government subsidization
- d) Do less damage to international markets, if not improve them

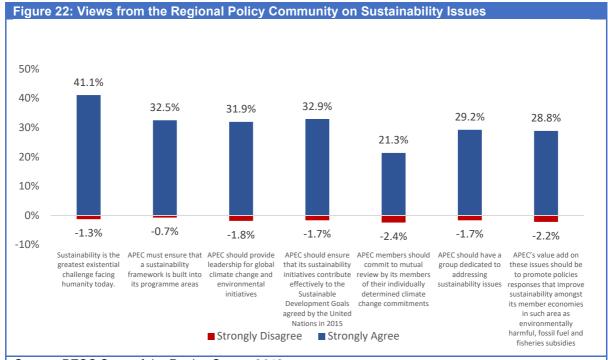
Climate Change

Part of PECC's recommendation for achieving the post-2020 vision for APEC was "(c)ommitted long term policy initiatives that promote sustainability." The PECC survey in 2019 found strong support for a number of measures, which was extraordinary, making it difficult to set a priority on which actions might be most useful for a group like APEC to pursue (Figure 22). There was solid support for the general proposition of a threat to humanity, followed by the need for APEC to ensure that sustainability is built into its program areas. There was less support for the idea that APEC economies should review each other's individually determined commitments but more support for focusing on more practical issues such as environmentally harmful subsidies.

Given the region's high and rising share of total global CO2 emissions (Figure 23), a solution to climate change without Asia-Pacific 'on board' is impossible. Addressing these issues is not new to the APEC agenda, indeed the first APE'C Leaders' Summit in 1993 envisaged a

"community in which our environment is improved as we protect the quality of our air, water and green spaces and manage our energy sources and renewable resources to ensure sustainable growth and provide a more secure future for our people."

⁴¹ https://hbr.org/2020/09/why-the-u-s-still-has-a-severe-shortage-of-medical-supplies



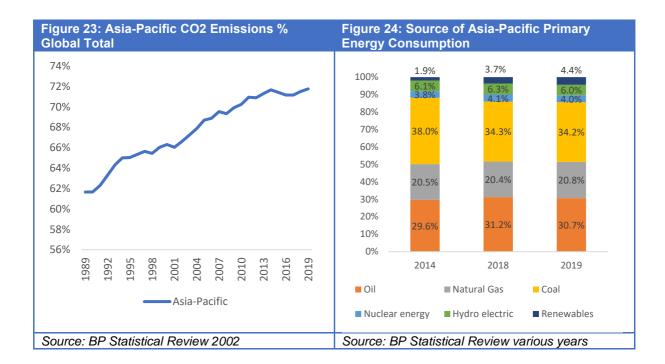
Source: PECC State of the Region Survey 2019

Question: Please indicate the level of agreement or disagreement that you have with the following statements on sustainability. Note: chart only the data for 'strong agreement' and 'strong disagreement'.

Since 1993, a number of targets have been set. As part of the APEC Growth Strategy adopted in 2010, APEC economies agreed to

"seek growth compatible with global efforts for protection of the environment and transition to green economies."

Part of that work included the assessment of the potential for reducing the energy intensity of economic output in APEC economies between 2005 and 2030, beyond the 25 percent aspirational goal agreed to by APEC Leaders in 2007. In 2011, they agreed to further reduce APEC's aggregate energy intensity by 45 percent by 2035, and in 2014 agreed to double the share of renewables in the APEC energy mix by 2030. The estimated share of renewables in primary energy consumption has already doubled (Figure 24) since 2014. However, the ambitions of APEC members have also increased. At present, 7 out of APEC's 21 economies have committed to achieving net-zero carbon emissions, with 5 out of the 7 committing to that target by 2050 (see table below). Others may choose to join that list. Various forms of regional cooperation can support the effort to reach those goals.



Economy	2050	The earliest possible time in the latter half of this century
Canada	X	
Chile	X	
China	X	
Japan	Χ	
Korea	X	
New Zealand	X	
Singapore		X

One example of a field of cooperation is the design of infrastructure investment strategies. Economist Nicholas Stern argues that spurring low-carbon growth requires

"the redirection of financial flows and investment in the supporting infrastructure that will form the backbone of economic development, mitigation and adaptation." ⁴²

Estimates suggest that over the next 20 years, the required investment in infrastructure will be in the region of US\$ 100 trillion or more, an average of US\$ 5 trillion – US\$ 6 trillion per year ⁴³ In short, the argument is that planning would not have us investing in the same models we have been that led us to the current situation. The Covid-19 crisis likely will lead to an even deeper re-examination of the desirability of those trends. As stated elsewhere, people have grown accustomed during the crisis to a working from home model, which changes the dynamics of urban development.⁴⁴ As earlier discussed, the IMF argues that public investment at this time can also crowd in private sector investment, and this provides a unique opportunity for addressing climate change issues and spurring growth at a critical juncture.

Another area of discussion and cooperation comes at the intersection of sustainability policies and trade policies. For example, the EU Green Deal includes measures to address carbon leakage – a carbon border adjustment mechanism. ⁴⁵ The language in the European Green Deal specifies that the measure would be designed to "comply with World Trade Organization rules and other international obligations of the EU". However, WTO rules have not caught up with commercial realities and the WTO itself now lacks a functioning dispute settlement mechanism.

⁴² http://pubdocs.worldbank.org/en/728181464700790149/Nick-Stern-PAPER.pdf

⁴³ https://www.brookings.edu/research/driving-sustainable-development-through-better-infrastructure-key-elements-of-a-transformation-program/

⁴⁴ http://pubdocs.worldbank.org/en/728181464700790149/Nick-Stern-PAPER.pdf

⁴⁵ https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576150542719&uri=COM%3A2019%3A640%3AFIN

APEC, working in a crowded field, needs to address some key issues raised in 2009 by the late long time PECC contributor Dr Hadi Soesastro. The first is the need to avoid 'green protectionism'. The second is the systemic importance of APEC members building confidence between advanced and emerging economies on an often-divisive issue. The recommendation back then was to view the reduction of risk and vulnerability as a key development issue, and to develop cost-effective ways to foster adaptation. It has not changed since 2009.

Efforts in these and other areas are likely to resonate with the business sector. In a survey undertaken in 2018 by the Carbon Disclosure Project of the world's 500 biggest companies about climate-related risks and opportunities, 225 estimated that the opportunities represented a potential market of over US\$2.1 trillion – mostly in demand for low emission products and services, as well as the potential for a better competitive position against shifting consumer preferences coming over the short- to medium-term. In addition, companies expressed the concern that

"Not only does a company need to speak to the efforts they're making, they also need to show through their actions that they are making improvements or taking mitigation measures. Not addressing climate change risks and impacts head on could result in a reduced demand for our goods and services because of negative reputation impact," said Alphabet [the parent of Google]. 46

In other words, companies not only need to respond to shifting consumer preferences, but they also have to take into account possible reputational damage by inaction.

Finance for Sustainable Development

Attention to issues of sustainability is more evident in financial markets. A report issued to APEC Finance Ministers this year by the OECD notes that Environmental, Social, and Governance ("ESG") investing has increased dramatically, such that assets under management of institutional investors committing to ESG practices has risen to US\$30 trillion globally. However, there is very little clarity of what ESG investing is in practice, and the range of objectives, approaches and metrics that all loosely associated with the term ESG raises attention about the integrity of the investment process.

In a survey of 18 APEC economies that produce guides for listed companies, three main disclosure standards were seen: The Global Reporting Initiative (GRI), the Sustainable Accounting Standard Board (SASB) and the Task Force on Climate-Related Financial Disclosures (TCFD).

ESG ratings are at an early stage of development in the region. This represents an opportunity for dialogue and learning from each other's experience. This work would be valuable in a post-crisis recovery and help provide basic information and metrics that would promote financing for sustainable development.

Conclusions

While recent forecasts for the region's economic performance in 2020 are less gloomy than earlier ones, growth remains largely contingent on massive government support. Furthermore, the pandemic has not been contained in some places where high infection rates require at least partial lockdowns, blocking any quick economic rebound. The lessons learnt globally for dealing with the pandemic need to be taken on board for a semblance of normality to be restored as the medical community works on a viable vaccine. However, that is only Phase 1 of dealing with the health crisis. Phase 2 -- the rollout and distribution of the vaccine -- needs much more attention.

While it is likely that there will be multiple vaccines on the market, the problems of distribution require the same amount of international attention. A multi-stakeholder approach that identifies chokepoints to distribution is one step in this process. APEC has a long history in identifying chokepoints in supply chains and has a successful track record in working with the business community on these issues.

Our emphasis has been to promote a framework that provides the restoration of confidence. Unfortunately, the current environment does not lend itself to international policy coordination – even though this is a time when that is absolutely crucial. Uncertainty fueled by the pandemic and protectionism is making many businesses cut spending and jobs. The region needs investments that help tackle the digital divide, climate change and inequality. Such investments can nurture sustainable growth – as well as generate both short

⁴⁶ https://www.cdp.net/en/research/global-reports/global-climate-change-report-2018/climate-report-risks-and-opportunities

and long-term dividends. This is important not only for the recovery but for addressing the weaknesses that had characterized growth before the pandemic struck.

One element of this framework is strong support for the multilateral trading system based on agreed values and norms reflected in updated rules and the more effective settlement of disputes. Chapter 2 of this report discusses how the next generation of trade agreements are attempting to create rules for digital trade and whether they are fit for purpose. We addressed the challenges currently facing the WTO. None of these issues are easy to address but importance of addressing them cannot be understated, nor are they insurmountable. The history of Asia-Pacific cooperation is valuable and instructive. At the time of APEC's formation the world was divided and seemingly facing increasing trade disputes but economies of this region nonetheless did come together in pursuit of a common vision.

International cooperation must play a critical role in the later-pandemic and post-pandemic periods. The current economic environment is one of great uncertainty, and uncertainty is one of most important inhibitors of robust growth.

Chapter 2:The New Generation of 'Digital' Trade Agreements: Fit for Purpose? Peter Lovelock⁴⁷

The digitalization of the economy necessitates governments align their domestic laws and policies and liberalize their markets to achieve greater connectivity and exchange of information across borders. A key driver among economies working towards such alignment is the goal of improving economic and social growth by exploiting the enormous opportunities enabled by digital trade. The growth of digital trade is dependent upon greater interconnectivity and interoperability across jurisdictions.

Digital trade integration, however, is a complex, multidimensional process that integrates regulatory structures and policy designs, digital technologies and business processes along the entire global digital value chain. It requires free cross-border movement of not only digital services, products and technologies but also other manufactured goods (e.g. internet platform-driven trade), data, capital, ideas, talent as well as the availability of integrated physical and virtual infrastructure. Thus, digital trade integration is not only dependent on the removal of digital trade barriers but also requires extensive technology, legal and policy coordination. Economies thus strive to achieve such interconnectivity and integration in digital trade through international trade agreements.

Recent trade agreements have begun including or focusing upon provisions to reduce regulatory barriers in digital trade and facilitate cross-border trade-in-data. However, at a time when digital demand and use are seen to be growing exponentially, and governments are focusing on accelerating their domestic digital economy growth, often accompanied with programs of digital transformation or digital government, regulatory restrictions on international digital trade are growing equally, if not more, rapidly. If the growth of domestic digital economies is to at least some extent dependent upon and underpinned by digital trade (the flow of cross-border data and the trade-in-data), then how to resolve this apparent contradiction?

Are these emerging FTAs, like their in-existence forerunners, deficient in supporting digital development and inclusion as well as fostering widespread international regulatory cooperation? It is obviously too early to judge what are very worthwhile approaches too harshly. However, as the proliferation of digital regulatory innovation and restriction illustrates they are very open to both negative and positive interpretation and, thus far, appear unable to facilitate a holistic digital trade regulatory framework given the conflicting domestic privacy and cybersecurity laws among trading partners.

Seizing the opportunity presented by digital trade, and realizing its potential for economic growth, will however depend on the development of harmonized trade rules. Trade rules will help remove a host of barriers impeding trade such as cross-border data flow restrictions, localization requirements, tariffs and quotas on ICT equipment, domestic and local standards that deviate from international standards, and lack of access to effective dispute resolution mechanisms.

Recognizing the above, this brief review of the current slate of digital trade agreements, began from the question of how similar are each of the agreements in their digital provisions, and the digital language being used? Is the language truly similar, or are there gaps and differences across these agreements – which may begin to explain some of the constraints we see in fostering digital trade. If so, what are these gaps? This led to a further question as to whether the approach being adopted – adapting and amending FTAs to incorporate a digital chapter or digital provisions is the appropriate means for developing a digital trade environment? And if so, what language was emerging that deserves to be "baked in" to such agreements going forward?

The New 'Digital' Trade Agreements

The past two years has seen the emergence of five key 'digital' trade agreements: the Comprehensive and Progressive Agreement for the Trans-Pacific Partnership (CPTPP), and the US-Mexico-Canada Agreement (USMCA) are existing FTAs updated and modified to include chapters on e-commerce and digital trade respectively. The remaining three – the US-Japan Digital Trade Agreement (Digital Trade Agreement); the Singapore-Chile-New Zealand Digital Economy Partnership Agreement (DEPA); and the Singapore-Australia Digital Economy Agreement (SADEA) – are positioned as 'digital-only' trade agreements.

These plurilateral agreements seek to develop international frameworks that harmonize digital trade rules, enhance cooperation on international standards, and create interoperable systems. In reality, they share much in common with traditional trade agreements in both format and language. A key question has

⁴⁷ Dr. Peter Lovelock is the Director of the Technology Research Project Corporate (TRPC).

become: does the current language being deployed in 'digital' trade agreements reflect and enable the achievement of these objectives? Or is it a limiting constraint – a repacking of new into old boxes?

Here we focus on four of the five agreements: the CPTPP, USMCA, the SADEA, and DEPA. A brief description of the four agreements is provided below with a summary of key approaches and objectives in Table 1.

Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP): The CPTPP is a free trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam. It first entered into force among six economies - Australia, Canada, Japan, Mexico, New Zealand and Singapore on 30 December 2018, and Vietnam on 14 January 2019. The four remaining members will enter after they complete their ratification processes. The e-commerce chapter of the agreement sets rules to facilitate digital trade, allowing participating members preferential access to each other's markets, and includes measures that will promote the flow of data, protection of privacy and consumer rights, and intellectual property.⁴⁸

US-Mexico-Canada Agreement (USMCA): USMCA is a free trade agreement between the United States, Mexico and Canada. It replaced the North American Free Trade Agreement (NAFTA) and entered into force in all members on 1 July 2020. The agreement includes a chapter on digital trade which builds on the provisions of the Trans-Pacific Partnership (TPP) and includes rules to prohibit customs on digital products, protect the flow of data, privacy, and intellectual property, and promotes collaboration on cybersecurity.49

US-Japan Digital Trade Agreement (US-Japan Agreement): The US and Japan implemented two separate trade deals, the Trade Agreement and Digital Trade Agreement in 2019. The Digital Trade Agreement went into effect on 1 January 2020 and provides guidelines on priority areas of digital trade. 50 It parallels the USMCA, and includes key provisions on prohibition of customs duties or other protectionist measures on digital products.

Singapore-Chile-New Zealand Digital Economy Partnership Agreement (DEPA): The DEPA was signed on 12 June 2020, between Chile, New Zealand and Singapore. It aims to strengthen cooperation in digital trade, and promote interoperability.⁵¹ It is divided into 12 modules that include treatment of digital products, data issues, emerging technologies, digital inclusion, and small and medium enterprise cooperation. It will enter into force once at least two parties have completed relevant domestic processes.

Singapore-Australia Digital Economy Agreement (SADEA): Singapore and Australia signed the SADEA on 6 August 2020. 52 Building on existing agreements under the CPTPP and the Singapore-Australia Free Trade Agreement, it sets a range of trade rules to capitalize on the digital economy. As part of the SADEA, the two economies have signed a series a MoUs on areas including e-invoicing, e-certification, personal data protection and digital identity.

Table 1: Context and Key Provisions of Four Digital Trade Agreements

СРТРР	CPTPP USMCA DEPA		SADEA
Chapter 14 covers	As part of the revised	DEPA contains twelve	Forms part of
Electronic Commerce	NAFTA, the USMCA	modules including	existing Singapore-
Trade Agreement has a	includes Chapter 19	Business and Trade	Australia Free
Framework for Digital	(Digital Trade),54 which	Facilitation, Digital	Trade Agreement
Economy ⁵³		Identities, Emerging	_
-		Trends and	

⁴⁸ Government of Canada, CPTPP, https://www.international.gc.ca/trade-commerce/trade-agreements-accords-

commerciaux/agr-acc/tpp-ptp/text-texte/toc-tdm.aspx?lang=eng

49 USTR, USMCA, https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canadaagreement/agreement-between

⁵⁰ USTR, U.S.-Japan Digital Trade Agreement, https://ustr.gov/sites/default/files/files/agreements/-

japan/Agreement between the United States and Japan concerning Digital Trade.pdf

51 MTI, Digital Economy Partnership Agreement, https://www.mti.gov.sg/lmproving-Trade/Digital-Economy-Agreements/The-Digital-Economy-Partnership-Agreement

⁵² DFAT, Australia-Singapore Digital Trade Agreement, https://www.dfat.gov.au/trade/services-and-digitaltrade/Pages/australia-and-singapore-digital-economy-agreement

https://www.mti.gov.sg/-/media/MTI/Newsroom/Press-Releases/2018/11/Press-release---The-CPTPP-Enters-Into-Force-in-December.pdf

54 https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/fact-sheets/modernizing

СРТРР	USMCA	DEPA	SADEA
 Parties agree to adopt and maintain consumer protection laws related to fraudulent and deceptive commercial activities online. Promotes a free and open internet that enables the creation and growth of new Internet services. Establishes requirements that ensures continued cross-border data flows, and discourages forced technology transfers Innovative companies are able to utilise the technology that works best and suits their needs. 	Prohibits customs duties from being applied to digital products Ensures any data localization requirements are minimized Recognizes the use of electronic authentication to promote digital transactions Guarantees enforceable consumer protections apply to the digital marketplace Promotes open access to government-generated public data Limits platform intermediate liability outside of IP enforcement	Technologies, and Innovation and the Digital Economy. Each individual module acts as a detachable component that could be used elsewhere. 55 Economies can join the agreement in its entirety or can incorporate specific modules in different trade negotiations.	The original provisions for Chapter 14 (E-Commerce) have been replaced by the provisions for the new Chapter 14 (Digital Economy) ⁵⁶

Similarities in 'Digital' Trade Language: A Path Forward?

Much of the commentary around these new 'digital' trade agreements has lauded what is seen as an adoption of common principles, and an emerging commonality of language that can be "baked in" to future trade agreements as digital becomes ever more ubiquitous and integral to trade. To the extent that there is a difference in these agreements, it is broadly seen to be one of approach: i.e., either they are amending language within an existing trade agreement (as is the case with the CPTPP and USMCA), or they are distinctly new digital-only agreements (as is the case with DEPA).

This is often summarized down into a 'shopping list' approach – as illustrated in Table 2 – suggesting that there is a common set of digital clauses that are gaining currency and, once recognized, can be input into agreements to ensure protections will be recognized and enforced.

Table 2: Comparison of Key Digital Trade Provisions

Key Provisions	CPTPP	USMCA	DEPA	SADEA
Elimination of customs duties on digital products and/or electronic transmissions	Yes	Yes	Yes	Yes
Non-discriminatory treatment of digital products	Yes	Yes	Yes	Yes
Electronic authentication and signatures	Yes	Yes	Yes	Yes
Paperless trading	Yes	Yes	Yes	Yes
Domestic e-transactions framework	Yes	Yes	Yes	Yes
Online consumer protection	Yes	Yes	Yes	Yes
Personal information protection	Yes	Yes	Yes	Yes
Measures against unsolicited commercial electronic communications	Yes	Yes	Yes	Yes
Cybersecurity	Yes	Yes	Yes	Yes
Cross-border transfer of information	Yes	Yes	Yes	Yes
Prohibition of data localization	Yes	Yes	Yes	Yes

⁵⁵https://www.eastasiaforum.org/2020/07/10/building-on-the-modular-design-of-depa/

https://www.dfat.gov.au/trade/agreements/in-force/safta/official-documents/Pages/default

Cross-border transfer of information by electronic means and prohibition of data localisation for financial services	No	Yes	NA	Yes
Liability of intermediary service providers	No	Yes	NA	NA
Non-disclosure of software source code and related algorithms	Partial	Yes	NA	Yes
Open government data	NA	Yes	Yes	Yes

Source: Adapted from http://asiantradecentre.org/talkingtrade/comparing-digital-rules-in-trade-agreements

Yes: the provision is included in a separate article and is fully addressed; **No**: the provision is included in a separate article, but is not addressed;

Partial: the provision is not fully addressed;

NA: the provision is not mentioned throughout the agreement.

In this telling, the key provisions relating to digital trade are "roughly the same and occur in all agreements". The "key provisions" captured are indeed key and important issues: customs duties on digital products, non-discriminatory treatment of digital products, cross-border information flows and localization requirements, non-disclosure of source code, e-transactions frameworks, online consumer protection, personal information protection, and cybersecurity. It is recognized that agreements differ "in their treatment of some provisions and the exemptions they offer to members", which is standard and to be expected for trade agreements.

However, what this shopping list approach fails to capture is potentially as important as the good news story that this apparent recognition of digital suggests. The gaps include the differences in interpretation and language of many of the of these key provisions, the provisions that are not common across the agreements, and the reasons for that, and the continued use of traditional jurisdictional considerations in the interpretation and application of the new digital provisions – most notably through carve outs for "legitimate public policy outcomes" (LPPOs), and domestically strategic sectors (such as finance, healthcare, education, communications and national security).

A more detailed rendering of the language being developed in these agreements provides a far more complex picture in terms of the commonality of digital trade language and protections being offered (Table 3). The summary table shows that the three most significant areas where the language has been developed, particularly when the DEPA and SADEA are compared to the earlier CPTPP and USMC, relate to paperless trading, personal information protection and location of computing facilities, with small developments in domestic electronic transaction frameworks, online consumer protection, and cybersecurity.

Table 3: Key and Developing Language Across Digital Trade Agreements

Provisions	СРТРР	USMCA	DEPA	SADEA
Digital Trade Facilitation	Agree to maintain legal framework governing electronic transactions consistent with UNCITRAL Model Law or UN Conventions on Use of Electronic Communications. Encourage use of interoperable electronic authentication.	Ensure that suppliers are not restricted in their use of electronic authentication or electronic signatures, thereby facilitating digital transactions.	Mutual recognition of safe, secure digital identities; Standardsbased e-invoicing; Promotion and recognition of fintech solutions for businesses.	compatible e-invoicing/ e-payment/ e-transactions frameworks; recognition of e-authentication and signatures, & single window for paperless trade.
Customs duties on digital products	Not impose customs duties on electronically transmitted content.	Prohibits customs on digital products, but parties may continue to impose internal	Customs duties will not be imposed on e- transmissions, including content. Parties can impose	Will not impose customs duties on e-transmissions.

Provisions	СРТРР	USMCA	DEPA	SADEA
		taxes or charges (HST).	internal taxes or charges.	
Non- discriminatory treatment of digital products	Will		each other's digital produ	cts
Cross-border data transfers	Promotes free flow of data across borders and minimizes data local requirements. However, members retain ability to maintain and amend regulations related to data flows.	Ensure that data can be transferred cross- border, and that limits on where data can be stored and processed are minimized.	Information should be transferred across borders so businesses can serve their customers, regardless of where they are located.	Allows for the transfer of data for business purposes, including in the financial sector.
Data localization	Parties will not impose localization that would force businesses to use local facilities. Members will not impede companies delivering cloud computing and data storage services		n requiring the use or loca urisdictions as a conditio	
Online consumer protection	Commitments to protect privacy, enforce consumer protections and combat 'spam' messages.	Enforceable consumer protections, incl for privacy and spam, apply to the digital marketplace.	Adopt or maintain regulations against fraudulent, misleading or deceptive conduct causing harm to online consumers.	A new commitment to cooperate in creating and promoting a safe online environment.
Personal information protection	Parties agree to adopt or maintain frameworks that provide protection of personal data, based on relevant international guides.	Includes reference to	APEC CBPR Privacy Fra Guidelines.	mework and OECD
Disclosure of source code	Parties will not demand access to proprietary software source code when seeking to import or distribute software.	Limit governments' ability to require disclosure of proprietary computer source code and algorithms.	NA	Access to or disclosure of software source code not required to be transferred as a condition for import, distribution, sale or use of software. Rule covers massmarket and custom software. Extends protection to SMEs
Intellectual property	Parties will accord national treatment with regard to IPR protection.	Requires full national treatment for copyright and IPR	NA	NA

Provisions	СРТРР	USMCA	DEPA	SADEA
Interactive computer services	NA	Internet platforms that simply host or process third-party content may be protected from liability for resulting harms.	NA	NA
Open government data	NA	Promote open access to government-generated public data, to enhance innovation and commercial applications.	Expand access to, and use of, government data to generate new opportunities, especially for SMEs.	Improve accessibility of publicly available, anonymised government data
Cybersecurity	Parties recognise the importance of cooperation on cyber security through the work of national computer emergency response teams.	Build capacity of cybersecurity authorities, strengthen collaboration mechanisms, and agree to focus on risk-based approaches instead of prescriptive regulation		
Cooperation Areas	Assisting SMEs in use of e-commerce; sharing information and experiences on e-commerce regulations;	Cybersecurity, spam prevention, consumer protection, and personal information.	Cybersecurity, fintech, government procurement, competition policy, open government data, and SMEs.	Digital trade standards, FinTech and RegTech enterprises, submarine cable protections.

Differences in Digital Trade Language

So, what differences emerge from a textual analysis of the four agreements across key provisions affecting digital trade?

Cross-border Information Transfers and Localization

With minor variations, all four agreements encourage the cross-border flow of information and prohibit localization requirements. On cross-border flows, CPTPP and USMCA replicate language obligating members to allow transfers, **but add the exception of allowing the adoption or maintenance of regulatory measures to achieve 'legitimate public policy objectives**'. The CPTPP also first explicitly recognizes respective regulatory requirements of members. DEPA and SADEA follow the same language as the CPTPP.

On localization, the USMCA (like the US-Japan Agreement) clearly prohibits the use or location of computing facilities as a condition for conducting business. The CPTPP prohibits it, but again adds the exception allowing regulatory measures to achieve legitimate public policy objectives. SADEA and DEPA again follow the language of the CPTPP. While these exceptions can be seen to preserve member rights in protecting privacy and security concerns, the vague LPPO language has already been used to create legal uncertainty, being interpreted subjectively, and used for more overtly protectionist purposes.

Future agreements could perhaps instead or in addition include an illustrative list of public policy objectives that provide guidance to all members, allowing sufficient flexibility but also preventing protectionist measures.

Information Transfers in Financial Services

In the trade agreements examined here, there are specific commitments that are intended to protect and promote the flow of information, and prohibit data localization requirements. But these do not always extend to the financial services sector. In this regard, the USMCA stands out distinctively as the high water benchmark, providing detailed provisions on data localization prohibitions in the financial services

chapter.⁵⁷ These provisions state that no member shall make use or location of computing facilities in its territory as the condition for conducting business, so long as financial regulatory authorities have "immediate, direct, complete, and ongoing access to information processed or stored on computing facilities". This explicit recognition is useful as economies have often justified localization to ensure government access to financial data. The SADEA subsequently replicated the USMCA language.

Having said that, all agreements have still left exemptions and room for domestic regulation in this area. Regarding data flows in financial services, CPTPP's language is particularly vague. 58 DEPA too upholds the economy's existing commitments under CPTPP to allow data to flow freely and prohibit rules requiring localization but does not extend these to financial services. The agreements also differ on national treatment and market access to digital payment services. While commitments in this regard, under WTO are optional, USMCA applies explicit national treatment to payments and market access to firms from other members. The CPTPP on the other hand has made national treatment optional, thus not guaranteeing nondiscriminatory treatment, and allowing members to give favourable treatment to local e-payment services, if foreign services are also allowed to operate. Additionally, the definition of e-payment services in the CPTPP focuses on credit card networks and business-to-business transactions⁵⁹ – whereas it is in retail payments (B2C transactions, e-commerce, and disruptive new payments channels) that much of the innovation and action has taken place.

Promotion of Interoperability

Amongst the four agreements reviewed, DEPA contains the most discussion on encouraging interoperability. As part of the agreement, members explicitly recognize the role of international standards in facilitating interoperability between digital systems and enhancing value-added products and services.

While DEPA excludes financial services from many provisions, it has a dedicated chapter on electronic payments. Here the parties have 'agreed to support the development of efficient, safe and secure cross border electronic payments by fostering the adoption and use of international accepted standards, promoting interoperability and interlinking of payment infrastructure'. SADEA contains similar language, even more specifically calling for both parties to adopt international standards such as ISO20022⁶⁰, so as to enable greater interoperability between e-payment systems.

DEPA members also agree to promote the use of APIs, by making them available to third party players. This additional commitment rounds out DEPA's holistic approach to reducing cross-border payment friction, by considering the full value chain of interconnected payment networks. 61 SADEA too uses similar language on facilitating APIs for interoperability, innovation and competition in e-payments.

In DEPA, commitments to interoperability are also included in personal information protection and data exchange systems, as well as digital identities where members will aim for the 'establishment or maintenance of appropriate frameworks to foster technical interoperability or common standards'. Similarly, there is a lot of emphasis on adoption of interoperable e-invoicing systems. Each member has agreed to 'base its measures related to e-invoicing on international standards, guidelines or recommendations, where they exist'. Similarly, SADEA's commitments to facilitate interoperability most prominently in eauthentication, e-invoicing, and data exchange systems. In other agreements, interoperability features in personal information protection in the US-Japan agreement and e-authentication in the CPTPP.

DEPA and SADEA's approach to encouraging interoperability could serve as a template for broader WTO discussions on e-commerce and digital trade.

Personal Information Protection

All four agreements focus on protection of personal information. CPTPP puts an obligation on members to adopt or maintain a legal framework that provides for the protection of the personal information. However, CPTPP recognizes different legal approaches to protecting personal information and encourages members to develop mechanisms to promote compatibility among different regimes. Like CPTPP, USMCA obligates members to adopt or maintain legal frameworks for protecting personal information, but incorporates additional provisions that make for a more robust framework, based on principles and international

USTR, USMCA, https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/17-Financial-Services.pdf
 The financial services chapter includes a section on transfer of information, stating that a financial institution can 'transfer information in electronic or other form, into and out of its territory, for data processing if such processing is required'. However, its application is left vague, without determining who is a financial institution, nor any mention of regulatory access. ⁵⁹ WEF (2020) Connecting Digital Economies: Policy Recommendations for Cross-Border Payments

http://www3.weforum.org/docs/WEF Connecting Digital Economies 2020.pdf

⁶⁰ Universal Financial Industry Message Scheme

⁶¹ WEF (2020) Connecting Digital Economies: Policy Recommendations for Cross-Border Payments http://www3.weforum.org/docs/WEF Connecting Digital Economies 2020.pdf

guidelines (specifically referencing the APEC Privacy Framework and the 2013 OECD Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data). USMCA also obligates members to ensure that any restriction on cross-border flows of personal information are "necessary and proportionate to the risks presented".

SADEA contains similar provisions to USMCA. But, in this case, in addition to recognizing APEC CBPR, members agree to "promote it, and encourage participation in the CBPR System, including by industry". This type of language – which is a significant departure from the more neutral traditional trade language – is likely to be crucial in fostering the success of such initiatives. DEPA contains provisions similar to USMCA and SADEA, but goes one step further with members agreeing to encourage the adoption of data protection trustmarks by businesses, in order to verify conformance to personal data protection standards and best practices. Members also mutually recognize the other members' trustmarks as a mechanism to facilitate cross-border information transfers. Again, this innovative formalization of emerging transfer mechanisms is a break from past practice and demonstrates a potential way forward that should be embraced.

Provisions that reference international guidelines and recommendations from OECD and APEC as a basis for framing domestic data protection laws will ensure that there is consistency in digital trade frameworks across economies. Similarly, recognising possible data transfer mechanisms such as the CBPR and data protection trustmarks will ease barriers for businesses, increase digital trust and facilitate digital trade integration.

Liability of Intermediary Service Providers

Intermediary service providers are suppliers of interactive computer services. Provisions on this refer to a specific distinction between service providers and their users. They seek to prevent service providers from being legally liable for harms related to information stored, processed, transmitted, distributed or made available by service users. It allows service providers to moderate online content by restricting any harmful or objectionable material.

USMCA specifically highlights liability of intermediary service providers. In exactly the same language they note that that members will 'not adopt or maintain measures that treat a supplier or user of an interactive computer service as an information content provider in determining liability for harms related to information stored, processed, transmitted, distributed, or made available by the service'.

After the exit of the US, CPTPP members took out this provision around intermediary liability. SADEA and DEPA also do not address intermediary liability.

Source Code

Source code of software, or an algorithm expressed in the source code, is a trade secret and provides competitive advantage to its owner. Provisions that prohibit the requirement of access to the source code or related algorithms are meant to provide security to businesses, and remove trade barriers.

Language in the USMCA specifies that members will not 'require the transfer of, or access to, code of software owned by a person of the other Party, or the transfer of, or access to, an algorithm expressed in that source code as a condition for the import, distribution, sale, or use of that software, or of products containing that software, in its territory'. At the same time, it is noted that this provision will not prevent a regulatory body or judicial authority of a party from requiring the source code of software or an algorithm expressed in the source code to be made available. SADEA contains the same provisions and language.

CPTPP Article 14.17 also prohibits the transfer of, or access to source code of software, as a condition for the import, distribution, sale or use of such software, or of products containing such software, in its territory. In addition, both CPTPP and SADEA include provisions stating that nothing in the agreement should prevent the inclusion or implementation of terms and conditions related to provision of source code in 'commercially negotiated contracts', or an economy from requiring modifications of source code to make the software compliant with existing laws or regulations. The CPTPP and SADEA, therefore, leave it to businesses to negotiate source code provisions on a contract by contract basis, but prevent governments from mandating access to source code.

CPTPP, however, includes an additional provision, limiting the prohibition on source code to only mass-market software or products containing such software and **does not include software used for 'critical infrastructure'**. Annex 8-B on technical barriers to trade also states that, with respect to ICT products that use cryptography and are designed for commercial applications, "no Party shall impose or maintain a

technical regulation or conformity assessment procedure that requires a manufacturer or supplier of the product, as a condition of the manufacture, sale, distribution, import or use of the product" to provide a private key or other encryption backdoor. This however, does not prevent a party's law enforcement authorities from requiring service providers that use encryption they control to provide unencrypted communications "pursuant to that Party's legal procedures").⁶²

Regarding mass-market software, it is also questionable how much of such software would not run on computers involved in critical infrastructure. For instance, commercial software could end up being used by government employees. This may inadvertently lead to domestic development of software for critical infrastructure, or that might be used in government systems.⁶³

DEPA makes no mention of requiring source code or algorithm expressed in the source code. However, in Module 3, treatment of digital products and related issues, it incorporates CPTPP's provision for protecting encryption.

What about provisions unique to a particular trade agreement?

- DEA is the only agreement that includes Submarine Telecommunications Cable Systems, Location of Computing Facilities for Financial Services, and RegTech Cooperation.
 - It also has a separate provision dedicated to standards⁶⁴
- DEPA is the only agreement that includes logistics and digital financial inclusion.
 - It is also the only agreement that excludes Electronic Authentication and Electronic Signatures and Source Code
- USMCA is the only agreement with an Interactive Computer Services provision.
 - This reflects an issue of particular importance to the US.
- **CPTPP** excludes **Open Government Data** whereas all three of the other agreements have these provisions this is an area that has come more rapidly into view since the early discussions around the TPP.
 - o Notably, none of the agreements give suitable recognition to the next logical development already taking place in this space: data sharing architectures and arrangements.
- Both DEA and CPTPP include Internet Interconnection Charge Sharing but DEPA and USMSC do not.

New 'Digital' Trade Agreements: A Way Forward, A False Start, or A Dead End?

There are three key challenges that are not yet addressed appropriately in any of these digital trade agreements:

- 1. Jurisdictional application of provisions that are definitionally cross-border, requiring transnational coordination for effective enforcement
 - This includes issues of national security and sensitivity, culturally sensitive interpretations and application, and issue of domestic registration and categorization
- 2. Coordination across domestic agencies of cross-cutting issues
 - This one, however, is not unique or new to digital agreements, just broader and more complex
- 3. Consistent definitions of what 'digital trade' actually is, along with definitions of many key digital trade provisions

It remains an open question as to whether the lack of appropriate mechanisms for dealing with these issues are merely early teething problems (similar to those which challenged the initial emergency of services-based trade agreements) or whether they will prove to be the achilles heel of the approach.

As regards, the gaps relating to the definitions being used – or not used as the case may be:

39

 ⁶² HBLR (2019) Cybersecurity and Trade Agreements: The State of the Art, https://www.hblr.org/wp-content/uploads/sites/18/2019/11/Cybersecurity-Provisions-in-Trade-Agreements FINAL.pdf
 63 HBLR (2019) Cybersecurity and Trade Agreements: The State of the Art, https://www.hblr.org/wp-content/uploads/sites/18/2019/11/Cybersecurity-Provisions-in-Trade-Agreements FINAL.pdf

ontent/uploads/sites/18/2019/11/Cybersecurity-Provisions-in-Trade-Agreements FINAL.pdf

⁶⁴ DEPA makes reference to open standards in other provisions

Digital trade: There is no definition of what 'digital trade' is, and each agreement uses and refers
to different aspects. DEA and DEPA refer to a digital economy agreement; CPTPP refers to
Electronic Commerce; while USMC refers to digital trade.

There needs to be needs to be a common understanding and definition of digital trade if it is to become commonly understood and applied.

• **Digital services:** There is no definition of digital services (only digital goods). Provisions make reference (and recommendation) to "non-discriminatory treatment of digital goods". **But what about digital services?**

The definition of digital services is highly relevant for imposing digital taxes, an area where a harmonized approach stands to deliver significant benefits and minimize already existing – and growing – trade frictions.

- **Digital identity:** There is no definition of digital identities. Even though it is called out for special focus in both **DEPA** and **SADEA**.
 - Nor of Artificial Intelligence. For effective recognition, promotion and enforcement of protections – let alone consistency with and across future arrangements – this is a very problematic oversight.

There needs to be definitions of umbrella digital technology terms such as AI, 5G, IoT, etc, or these will render themselves moot in relevance and applicability for regulatory coordination.

- Data classification and Platform typologies: There is no recognition of the different types of
 data, despite recognition of 'legitimate public policy objectives' for certain types of data to require
 special consideration, protection and regulation, including for the purposes of localization. Equally,
 there is no recognition of the different types of digital platforms even as there are key provisions
 protecting intermediate liability.
- Limited reference to online platforms, yet a lot of the trade happens via online platforms. The only
 reference made in SADEA and DEPA "encourage participation by the Parties' SMEs in platforms
 that could help SMEs link with international suppliers, buyers and other potential business
 partners"65

Table 4: Definitional Gaps Across Digital Trade Agreements

Definitions	CPTPP	USMSC	DEPA	SADEA
Definition of Digital Trade	No. Chapter is titled "Electronic Commerce"	No. Although Chapter 19 is called "Digital Trade"	No. Titled "Digital Economy"	No. Chapter is titled "Digital Economy
Algorithm		Yes		
Computing Facility	Yes	Yes	Yes	Yes
Digital Products	Yes	Yes	Yes	Yes
Electronic Authentication	Yes	Yes	Yes	Yes
Electronic Signature		Yes		
Government information		Yes		
Information content provider		Yes		
Interactive computer services		Yes		
Personal Information	Yes	Yes	Yes	Yes

-

 $^{^{\}rm 65}$ Article 10.2 of DEPA and Article 36 of DEA

Definitions	СРТРР	USMSC	DEPA	SADEA
Trade Administration documents	Yes	Yes	Yes	Yes
Unsolicited Commercial Electronic Message	Yes	Yes	Yes	Yes
Electronic Transmission	Yes		Yes	Yes transmission made using any electromagnetic means, including by photonic means
Electronic invoicing			Yes	Yes
Electronic payments			Yes	Yes
Electronic records			Yes means record generated, communicated, received or stored by electronic means in an information system or for transmission from one information system to another;	
Electronic version				Yes Document in an electronic format prescribed by a Party, including a document sent by facsimile transmission;
Open standards			Yes	,
Single Window			Yes	
Open data			Yes	
FinTech				Yes
RegTech				Yes
ICT Cryptogoraphy				Yes

Appendix 1: Comparison of Language for Eleven Common Provisions Across the Four Agreements

Provision	CPTPP	USMSC	SADEA
Paperless	Article 14.9	Article 19.9	Article 12
Trading	Each Party shall endeavour to: (a) make trade administration documents available to the public in electronic form; and (b) accept trade administration	Each Party shall endeavor to accept a trade administration document submitted electronically as the legal equivalent of the paper version of that document.	1. Each Party shall make publicly available, which may include through a process prescribed by that Party, electronic versions of all of its trade administration documents in English. 2. Each Party shall accept completed electronic versions of its trade administration documents as the legal

Provision	СРТРР	USMSC	SADEA
	documents		equivalent of paper documents
	submitted		except where:
	electronically as		(a) there is a domestic or
	the legal		international legal requirement
	equivalent of the		to the contrary; or
	paper version of those documents.		(b) doing so would reduce the effectiveness of the trade
	those documents.		administration process.
			3. Each Party shall endeavour to
			establish or maintain a single
			window enabling
			traders to submit trade
			administration documents and
			data requirements for
			importation, exportation or
			transit of goods through a single
			entry point to the participating
			authorities
	1		or agencies.
			4. Each Party shall endeavour to
	1		establish or maintain a
	1		seamless, trusted and secure interface with the other Party's
			Single Window to facilitate the
			exchange of data related to
			trade administration documents,
			which may include:
			(a) sanitary and phytosanitary
			certificates;
			(b) customs declaration data;
			and
			(c) any other documents, as
			jointly determined by the Parties.
			5. Each Party recognises the
			importance of facilitating the
			exchange of electronic records used in commercial
			trading activities between
			enterprises within its territory.
			6. The Parties shall endeavour
	1		to develop data exchange
			systems to support the
	1		exchange of:
	1		(a)data relating to the trade
	1		administration documents
	1		referred to in paragraph 4
	1		between the competent
			authorities of each Party; and
	1		(b) electronic records used in commercial trading activities
	1		between enterprises
	1		Within each Party's territory.
	1		7. The Parties shall cooperate
	1		and collaborate on new
	1		initiatives which promote,
	1		encourage, support and facilitate
	1		the use and adoption of the data
	1		exchange systems referred to in
	1		paragraph 6, including through:
	1		(a) the sharing of information
	1		and experiences, including the
			exchange of best practices, in

Provision CPTPP USMSC SADEA
the area of development and governance of data exchange systems, and (b) collaboration on pilot projects that relate to the development and governance of data exchange systems. 8. The Parties recognise that data exchange systems refe to in paragraph 6 should, as as possible, be compatible a interoperable with each other To this end, the Parties shall endeavour to work towards the development and adoption on internationally-recognised standards in the development and governance of the data exchange systems. 9. The Parties shall coopera bilaterally and in international fora, where appropriate, to promote acceptance of electronic versions of trade administration documents are electronic records used in commercial trading activities between enterprises. 10. In developing initiatives to provide for the use of papert trading, each Party shall endeavour to take into account the methods agreed international organisations. Article 5 1. No Party shall impose customs duties on electronic transmitted electronically, between a person of one Party and a person of another Party. 2. For greater certainty, paragraph 1 shall not preclude a Party from imposing internal taxes, fees or other charges on a digital product transmitted electronically, provided that those taxes, fees or other charges on consistent with this Agreement.

Provision	СРТРР	USMSC	SADEA
	manner consistent with this Agreement.		
Non-discriminatory Treatment of Digital goods (Same language, although USMC makes no reference to broadcasting and no reference to IP)	Article 14.4 1. No Party shall accord less favourable treatment to digital products created, produced, published, contracted for, commissioned or first made available on commercial terms in the territory of another Party, or to digital products of which the author, performer, producer, developer or owner is a person of another Party, than it accords to other like digital products. 2. Paragraph 1 shall not apply to the extent of any inconsistency with the rights and obligations in Chapter 18 (Intellectual Property). 3. The Parties understand that this Article does not apply to subsidies or grants provided by a Party, including government-supported loans, guarantees and insurance. 4. This Article shall not apply to broadcasting.	Article 19.4 1. No Party shall accord less favorable treatment to a digital product created, produced, published, contracted for, commissioned, or first made available on commercial terms in the territory of another Party, or to a digital product of which the author, performer, producer, developer, or owner is a person of another Party, than it accords to other like digital products. 2. This Article does not apply to a subsidy or grant provided by a Party, including a government-supported loan, guarantee, or insurance.	Article 6 1. Neither Party shall accord less favourable treatment to a digital product created, produced, published, contracted for, commissioned or first made available on commercial terms in the territory of the other Party, or to a digital product of which the author, performer, producer, developer or owner is a person of the other Party, than it accords to other like digital products. 2. Paragraph 1 shall not apply to the extent of any inconsistency with the rights and obligations in the TRIPS Agreement or with Chapter 13 (Intellectual Property). 3. The Parties understand that this Article does not apply to subsidies or grants provided by a Party including government-supported loans, guarantees and insurance. 4. This Article shall not apply to broadcasting.
Domestic Electronic Transaction Framework (Language has been developed)	Article 14.5 1. Each Party shall maintain a legal framework governing electronic transactions consistent with the principles of the	Article 19.5 1. Each Party shall maintain a legal framework governing electronic transactions consistent with the principles of the UNCITRAL Model Law on Electronic Commerce 1996. 2. Each Party shall endeavor to:	Article 8 1. For the purposes of this Article: (a) an electronic record that satisfies the requirements set out in Article 10 of the UNCITRAL Model Law on

Provision	СРТРР	USMSC	SADEA
	UNCITRAL Model Law on Electronic Commerce 1996 or the United Nations Convention on the Use of Electronic Communications in International Contracts, done at New York, 2. Each Party shall endeavour to: (a) avoid any unnecessary regulatory burden on electronic transactions; and (b) facilitate input by interested persons in the development of its legal framework for electronic transactions.	(a) avoid unnecessary regulatory burden on electronic transactions; and (b) facilitate input by interested persons in the development of its legal framework for electronic transactions.	Electronic Transferable Records (2017), and may include an electronic bill of lading; and (b) international bodies" means international bodies to which both Parties are participants or members. 2. Each Party shall maintain a legal framework governing electronic transactions consistent with the principles of the UNCITRAL Model Law on Electronic Commerce (1996) or the United Nations Convention on the Use of Electronic Communications in International Contracts, done at New York on November 23, 2005. 3. Each Party shall endeavour to: (a) avoid any unnecessary regulatory burden on electronic transactions; and (b) facilitate input by interested persons in the development of its legal framework for electronic transactions, including in relation to trade documentation. 4. The Parties recognise the importance of developing mechanisms to facilitate the use of electronic transferrable records. To this end, in developing such mechanisms, the Parties shall endeavour to take into account, as appropriate, relevant model legislative texts developed and adopted by international bodies, such as the UNCITRAL Model Law on Electronic Transferable Records (2017).
Online Consumer Protection (Language developed in DEPA and DEA)	Article 14.7 1. The Parties recognise the importance of adopting and maintaining transparent and effective measures to protect consumers from fraudulent and deceptive commercial activities as referred to in	Article 19.7 1. The Parties recognize the importance of adopting and maintaining transparent and effective measures to protect consumers from fraudulent or deceptive commercial activities as referred to in Article 21.4.2 (Consumer Protection) when they engage in digital trade. 2. Each Party shall adopt or maintain consumer protection laws to proscribe fraudulent and deceptive commercial activities that cause harm or	Article 15 1. The Parties recognise the importance of adopting and maintaining transparent and effective measures to protect consumers from misleading and deceptive commercial activities, unfair contract terms and unconscionable conduct when they engage in electronic commerce. 2. For the purposes of this Article, misleading and deceptive commercial activities refer to those commercial practices that are misleading or

Provision	СРТРР	USMSC	SADEA
	Article 16.6.2	potential harm to consumers	deceptive and cause actual
	(Consumer	engaged in online	harm to consumers, or that pose
	Protection) when	commercial activities.	a potential threat of such harm if
	they engage in	3. The Parties recognize the	not prevented. For example:
	electronic	importance of, and public	(a) making a misrepresentation
	commerce.	interest in, cooperation	of material fact, including an
	2. Each Party shall	between their respective	implied factual
	adopt or maintain	national consumer protection	misrepresentation, that may
	consumer protection laws to	agencies or other relevant bodies on activities related to	cause significant detriment to the economic
	proscribe	cross-border digital trade in	interests of a misled consumer;
	fraudulent and	order to enhance consumer	(b) failing to deliver products or
	deceptive	welfare. To this end, the	provide services to a consumer
	commercial	Parties affirm that cooperation	after the
	activities that	under paragraphs 21.4.3	consumer is charged; or
	cause harm or	through 21.4.5 (Consumer	(c) charging or debiting a
	potential harm to	Protection) includes	consumer's financial, internet or
	consumers	cooperation with respect to	other accounts without
	engaged in online	online commercial activities.	authorisation.
	commercial		Each Party shall adopt or
	activities.		maintain consumer protection
	3. The Parties		laws to proscribe
	recognise the importance of		misleading and deceptive commercial activities that cause
	cooperation		harm or potential harm to
	between their		consumers engaged in online
	respective national		commercial activities.
	consumer		4. The Parties recognise the
	protection		importance of cooperation
	agencies or other		between their respective
	relevant bodies on		national consumer protection
	activities related to		agencies or other relevant
	cross-border		bodies on activities related to
	electronic		cross-border electronic
	commerce in order		commerce in order to enhance
	to enhance		consumer welfare.
	consumer welfare.		5. To this end, the Parties shall
	To this end, the Parties affirm that		promote, as appropriate and subject to the laws and
	the cooperation		
	sought		regulations of each Party, cooperation on matters of
	under Article		mutual interest related to
	16.6.5 and Article		misleading and deceptive
	16.6.6 (Consumer		commercial activities, including
	Protection)		in the enforcement of their
	includes		consumer protection laws, with
	cooperation with		respect to online commercial
	respect to online		activities.
	commercial		6. The Parties recognise the
	activities.		benefits of mechanisms,
			including alternative dispute resolution, to facilitate the
			resolution, to facilitate the resolution of disputes regarding
			electronic commerce
			transactions
Unsolicited	Article 14.4	Article 19.3	Article 19
Commercial	1. Each Party shall	Each Party shall adopt or	Each Party shall adopt or
Electronic	adopt or maintain	maintain measures providing	maintain measures regarding
Messages	measures	for the limitation of unsolicited	unsolicited commercial
(similar	regarding	commercial electronic	electronic messages sent to an
language)	unsolicited	communications.	electronic mail address that:

Provision	CPTPP	USMSC	SADEA
	commercial	2. Each Party shall adopt or	(a) require a supplier of
	electronic	maintain measures regarding	unsolicited commercial
	messages that:	unsolicited commercial	electronic messages to
	a) require suppliers	electronic	facilitate the ability of a recipient
	of unsolicited	communications sent to an	to prevent ongoing reception of
	commercial	electronic mail address that	those
	electronic	(a) require suppliers of	messages; or
	messages to	unsolicited commercial	(b) require the consent, as
	facilitate the ability	electronic messages to	specified in the laws and
	of recipients to	facilitate the	regulations of each Party,
	prevent ongoing	ability of recipients to prevent	of recipients to receive
	reception of	ongoing reception of those	commercial electronic
	those messages;	messages; or	messages.
	(b) require the	(b) require the consent, as	2. Each Party shall endeavour to
	consent, as	specified in the laws and	adopt or maintain measures that enable consumers
	specified according to the laws and	regulations of each Party, of recipients to receive	
	regulations of each	commercial electronic	to reduce or prevent unsolicited commercial electronic messages
	Party, of recipients	messages.	sent other than to an electronic
	to receive	3. Each Party shall endeavor	mail address, or otherwise
	commercial	to adopt or maintain measures	provide for the minimisation of
	electronic	that enable consumers to	these messages.
	messages; or	reduce or prevent unsolicited	3. Each Party shall provide
	(c) otherwise	commercial electronic	recourse against a supplier of
	provide for the	communications sent other	unsolicited commercial
	minimisation of	than to an electronic mail	electronic messages that does
	unsolicited	address.	not comply with a measure
	commercial	4. Each Party shall provide	adopted or maintained in
	electronic	recourse in its law against	accordance with paragraphs 1
	messages.	suppliers of unsolicited	or 2.
	2. Each Party shall	commercial electronic	4. The Parties shall endeavour
	provide recourse	communications that do not	to cooperate in appropriate
	against suppliers	comply with a measure	cases of mutual concern
	of unsolicited	adopted or maintained	regarding the regulation of
	commercial	pursuant to	unsolicited commercial
	electronic messages that do	paragraph 2 or 3. 5. The Parties shall endeavor	electronic messages.
	not comply with the	to cooperate in appropriate	
	measures adopted	cases of mutual concern	
	or	regarding the regulation of	
	maintained	unsolicited commercial	
	pursuant to	electronic communications.	
	paragraph 1.		
	3. The Parties shall		
	endeavour to		
	cooperate in		
	appropriate cases		
	of mutual		
	concern regarding		
	the regulation of		
	unsolicited		
	commercial		
	electronic		
Deves	messages.	Article 40.0	Auticle 47
Personal	Article 14.8	Article 19.8	Article 17
Information	1. The Parties	1. The Parties recognize the	1. The Parties recognise the
Protection (significant	recognise the	economic and social benefits	economic and social benefits of
(significant change in	economic and social benefits of	of protecting the personal information of users of digital	protecting the personal information of persons who
language)	protecting the	trade and the contribution that	conduct or engage in electronic
language)	personal	this makes to enhancing	transactions and the
	information of	and makes to simulationing	adiodolio dia dio
		<u> </u>	<u> </u>

Provision	СРТРР	USMSC	SADEA
	users of electronic	consumer confidence in digital	contribution that this makes to
	commerce and the	trade.	enhancing consumer confidence
	contribution that	2. To this end, each Party shall	in electronic commerce.
	this makes to	adopt or maintain a legal	2. To this end, each Party shall
	enhancing	framework that provides for the	adopt or maintain a legal
	consumer	protection of the personal	framework that provides
	confidence in	information of the users of	for the protection of the personal
	electronic	digital trade. In the	information of persons who
	commerce.	development of this legal	conduct or engage in electronic
	2. To this end,	framework, each Party should	transactions. In the development
	each Party shall	take into account principles	of its legal framework for the
	adopt or maintain a	and guidelines of relevant	protection of personal
	legal framework	international bodies,	information, each Party shall
	that	such as the APEC Privacy	take into account the principles
	provides for the	Framework and the OECD	and guidelines of relevant
	protection of the	Recommendation of the	international bodies, such as the
	personal	Council concerning Guidelines	APEC Cross-Border Privacy
	information of the	governing the Protection of	Rules System and the OECD
	users of electronic	Privacy and Transborder	Guidelines Governing the
	commerce. In the	Flows of Personal	Protection of Privacy and Trans-
	development of its	Data (2013).	border Flows of Personal Data.
	legal framework for	3. The Parties recognize that	3. To this end, the key principles
	the protection of personal	pursuant to paragraph 2, key	each Party shall take into
	information, each	principles include: limitation on	account when developing
	Party should take	collection; choice; data quality; purpose specification; use	its legal framework include limitation on collection, data
	into account	limitation; security safeguards;	quality, purpose specification,
	principles and	transparency; individual	use limitation, security
	guidelines of	participation; and	safeguards, transparency,
	relevant	accountability. The Parties	individual participation and
	international	also recognize the importance	accountability.
	bodies.	of ensuring compliance with	4. Each Party shall adopt non-
	3. Each Party shall	measures to protect personal	discriminatory practices in
	endeavour to	information and ensuring that	protecting persons who conduct
	adopt non-	any restrictions on cross-	or engage in electronic
	discriminatory	border flows of personal	transactions from personal
	practices in	information are necessary and	information protection violations
	protecting users of	proportionate to the risks	occurring within its jurisdiction.
	electronic	presented.	5. Each Party shall publish
	commerce from	Each Party shall endeavor	information on the personal
	personal	to adopt non-discriminatory	information protections it
	information	practices in protecting users of	provides to persons who
	protection	digital trade from personal	conduct or engage in electronic
	violations occurring	information protection	transactions, including how:
	within its	violations occurring within its	(a) a natural person can pursue
	jurisdiction.	jurisdiction.	remedies; and
	4. Each Party	5. Each Party shall publish	(b) business can comply with
	should publish	information on the personal	any legal requirements.
	information on the	information protections it	6. Each Party shall encourage
	personal information	provides to users of digital trade, including how:	enterprises in its territory to publish, including on the
	protections it	(a) a natural person can	Internet, their policies and
	provides to users	pursue a remedy; and	procedures related to protection
	of electronic	(b) an enterprise can comply	of personal information.
	commerce,	with legal requirements.	7. Recognising that the Parties
	including how:	6. Recognizing that the Parties	may take different legal
	(a) individuals can	may take different legal	approaches to protecting
	pursue remedies;	approaches to protecting	personal information, each Party
	and	personal information, each	shall encourage the
	(b) business can	Party should encourage the	development of mechanisms to
	comply with any	development of mechanisms	promote compatibility between
	legal requirements.	to promote	these different regimes. These
	1	1 p	

Provision	CPTPP	USMSC	SADEA
	5. Recognising that	compatibility between these	mechanisms may include the
	the Parties may	different regimes. The Parties	recognition of regulatory
	take different legal	shall endeavor to exchange	outcomes, whether accorded
	approaches to	information on the	autonomously or by mutual
	protecting personal	mechanisms applied in their	arrangement, or broader
	information, each	jurisdictions and explore ways	international frameworks. To this
	Party should	to extend these or other	end, the Parties shall
	encourage the	suitable	endeavour to exchange
	development of mechanisms to	arrangements to promote compatibility between them.	information and share experiences on any such
	promote	The Parties recognize that the	mechanisms
	compatibility	APEC CrossBorder Privacy	applied in their jurisdictions and
	between these	Rules system is a valid	explore ways to promote
	different regimes.	mechanism to facilitate cross-	compatibility between them.
	These	border information transfers	8. The Parties recognise that the
	mechanisms may	while protecting personal	CBPR System is a valid
	include the	information.	mechanism to facilitate
	recognition of		cross-border information
	regulatory		transfers while protecting
	outcomes, whether		personal information
	accorded		9. The Parties shall endeavour
	autonomously or by mutual		to jointly promote the CBPR System, with the aim to
	arrangement, or		improving awareness of, and
	broader		participation in, the CBPR
	international		System, including by industry
	frameworks. To		3 ,
	this end, the		
	Parties shall		
	endeavour to		
	exchange		
	information on		
	any such mechanisms		
	applied in their		
	jurisdictions and		
	explore ways to		
	extend		
	these or other		
	suitable		
	arrangements to		
	promote		
	compatibility between them.		
Principles on	Article 14.10	Article 19.10	Article 20
Access and	Subject to	The Parties recognize that it is	Subject to their respective
use of Internet	applicable policies,	beneficial for consumers in	applicable policies, laws and
for Electronic	laws and	their territories to be able to:	regulations, the Parties
Commerce	regulations, the	(a) access and use services	recognise the benefits of
(same	Parties recognise	and applications of a	consumers in their territories
language)	the benefits of	consumer's choice available	having the ability to:
	consumers in their	on the Internet, subject to	(a) access and use services and
	territories having	reasonable network	applications of a consumer's
	the ability to: (a) access and use	management; (b) connect the end-user	choice available on the Internet, subject to
	services and	devices of a consumer's	reasonable network
	applications of a	choice to the Internet, provided	management
	consumer's choice	that such devices do not harm	(b) connect the end users
	available on the	the network; and	devices of a consumer's choice
	Internet, subject to	(c) access information on the	to the Internet provided that
	reasonable	network management	such devices do not harm the
	network	practices of a consumer's	network; and

Provision	СРТРР	USMSC	SADEA
	management;	Internet access service	(c) access information on the
	(b) connect the	supplier.	network management practices
	end-user devices		of a consumer's
	of a consumer's choice to the		Internet access service supplier.
	Internet, provided		
	that such devices		
	do not harm the		
	network; and		
	(c) access		
	information on the		
	network management		
	practices of a		
	consumer's		
	Internet access		
	service supplier.		
Cross-border	Article 14.11	Article 19.11	Article 23
Transfer of Information by	1. The Parties	No Party shall prohibit or restrict the cross-border	The Parties recognise that each Party may have its own
Electronic	recognise that each Party may	transfer of information,	regulatory requirements
Means (same	have its own	including personal information,	concerning the transfer of
language)	regulatory	by electronic means if this	information by electronic means.
	requirements	activity is for the conduct of the	Neither Party shall prohibit or
	concerning the	business of a	restrict the cross-border transfer
	transfer of	covered person.	of information by
	information by electronic means.	This Article does not prevent a Party from adopting	electronic means, including personal information, if this
	2. Each Party shall	or maintaining a measure	activity is for the conduct of
	allow the cross-	inconsistent with paragraph 1	business of a covered person.
	border transfer of	that is necessary to achieve a	3. Nothing in this Article shall
	information by	legitimate public policy	prevent a Party from adopting or
	electronic means,	objective, provided that	maintaining
	including personal information, when	the measure: (a) is not applied in a manner	measures inconsistent with paragraph 2 to achieve a
	this activity is for	which would constitute a	legitimate public policy objective,
	the	means of arbitrary or	provided that the measure:
	conduct of the	unjustifiable discrimination or a	(a) is not applied in a manner
	business of a	disguised restriction on trade;	which would constitute a means
	covered person.	and	of arbitrary or
	3. Nothing in this Article shall	(b) does not impose restrictions on transfers of	unjustifiable discrimination or a disguised restriction on trade;
	prevent a Party	information greater than are	and
	from adopting or	necessary to achieve the	(b) does not impose restrictions
	maintaining	objective.	on transfers of information
	measures		greater than are
	inconsistent with		required to achieve the
	paragraph 2 to achieve a		objective.
	legitimate public		
	policy		
	objective, provided		
	that the measure:		
	(a) is not applied in a manner which		
	would constitute a		
	means of		
	arbitrary or		
	unjustifiable		
	discrimination or a		
	disguised		

Provision	СРТРР	USMSC	SADEA
	restriction on trade;		
	and		
	(b) does not		
	impose restrictions on transfers of		
	information greater		
	than are required		
	to achieve the		
	objective.		
Location of	Article 14.13	Article 19.12	Article 24
Computing	1. The Parties	No Party shall require a	1. The Parties recognise that
Facilities	recognise that	covered person to use or	each Party may have its own
(language has been	each Party may have its own	locate computing facilities in that Party's territory as a	regulatory requirements regarding the use of computing
developed)	regulatory	condition for conducting	facilities, including requirements
αστοισμού	requirements	business in that territory.	that seek to ensure the security
	regarding the use	ĺ	and confidentiality of
	of computing		communications.
	facilities, including		2. Neither Party shall require a
	requirements that		covered person to use or locate
	seek to ensure the security and		computing facilities territory as a condition for
	confidentiality of		conducting business in that
	communications.		territory.
	2. No Party shall		3. Nothing in this Article shall
	require a covered		prevent a Party from adopting or
	person to use or		maintaining
	locate computing		measures inconsistent with
	facilities in that Party's territory as		paragraph 2 to achieve a legitimate public policy objective,
	a condition for		provided that the measure:
	conducting		(a) is not applied in a manner
	business in that		which would constitute a means
	territory.		of arbitrary or
	3. Nothing in this		unjustifiable discrimination or a
	Article shall		disguised restriction on trade;
	prevent a Party from adopting or		(b) does not impose restrictions
	maintaining		on the use or location of
	measures		computing facilities
	inconsistent with		greater than are required to
	paragraph 2 to		achieve the objective.
	achieve a		4. This Article shall not apply with
	legitimate public policy		respect to "financial institution" or a "financial service supplier of
	objective, provided		a Party" as defined in the Article
	that the measure:		1 (e) and (h) (Definitions)
	(a) is not applied in		respectively
	a manner which		of Chapter 9 (Financial
	would constitute a		Services).
	means of arbitrary		
	or unjustifiable discrimination or a		
	disguised		
	restriction on trade;		
	and		
	(b) does not		
	impose restrictions		
	on the use or		
	location of		
	computing		

Provision	CPTPP	USMSC	SADEA
	facilities greater		
	than are required		
	to achieve the		
	objective.		
Cybersecurity	Article 14.16	Article 19.15	Article 34
	The Parties	The Parties recognize that	The Parties have a shared
	recognise the	threats to cybersecurity	vision to promote secure digital
	importance of:	undermine confidence in	trade to achieve global
	(a) building the	digital trade. Accordingly, the	prosperity and recognise that
	capabilities of their	Parties shall endeavor to:	cybersecurity underpins the
	national entities	(a) build the capabilities of	digital economy.
	responsible for	their respective national	2. The Parties recognise the
	computer security	entities responsible for	importance of:
	incident response;	cybersecurity incident	(a) building the capabilities of
	and	response; and	their government agencies
	(b) using existing	(b) strengthen existing	responsible for
	collaboration	collaboration mechanisms for	computer security incident
	mechanisms to	cooperating to identify and	response;
	cooperate to	mitigate malicious intrusions or	(b) using existing collaboration
	identify	dissemination of malicious	mechanisms to cooperate to
	and mitigate	code that affect electronic	identify and
	malicious	networks, and use those	mitigate malicious intrusions or
	intrusions or	mechanisms to swiftly address	dissemination of malicious code
	dissemination of	cybersecurity incidents, as well	that affect
	malicious code that	as for the sharing of	the electronic networks of the
	affect the	information for awareness and	Parties; and
	electronic networks	best practices.	(c) workforce development in the
	of the Parties.	2. Given the evolving nature of	area of cybersecurity, including
		cybersecurity threats, the	possible
		Parties recognize that risk-	initiatives relating to mutual
		based approaches may be	recognition of qualifications,
		more effective than	diversity and
		prescriptive regulation in	equality
		addressing those threats.	
		Accordingly, each Party shall	
		endeavor to employ, and	
		encourage enterprises within	
		its jurisdiction to use, risk-	
		based approaches that rely on	
		consensus-based standards	
		and risk management best	
		practices to identify and	
		protect against cybersecurity	
		risks and to detect, respond to,	
		and recover from cybersecurity	
		events.	