

KEY POINTS

- The introduction of vaccine passes, a digital or hard copy pass that documents receipt of a particular vaccination, could substantially facilitate cross-border travel and help revive the tourism sector. Based on the projected vaccine rollout schedules, it is estimated that a recovery of the tourism sector to the pre-pandemic level can be expected by 2023 at the earliest, if the vaccine passes can be fully implemented.
- Currently, only very few vaccine passes exist in the region. Agreeing on a common protocol within Asia would substantially ease travel. Negotiations should start as soon as possible given the pandemic's heavy toll on tourism.
- Vaccine passes should not be the only strategy to foster international travel. Harmonized quarantine protocols and cross-border contact tracing could also make travel more predictable and safer for everybody, including for unvaccinated people.

Can Vaccination Help Restart Tourism?

INTRODUCTION

International tourist arrivals dropped over 80% in 2020 in Asia and the Pacific and the outlook for 2021 remains daunting, as most border restrictions are still in place.¹

The tourism sector has been one of the hardest hit by the coronavirus disease (COVID-19) pandemic. In Asia, international tourist arrivals dropped over 80% year on year in 2020 according to Asian Development Bank (ADB) estimates, worse than the 74% fall globally, as estimated by the United Nations World Tourism Organization (UNWTO) (2021a).

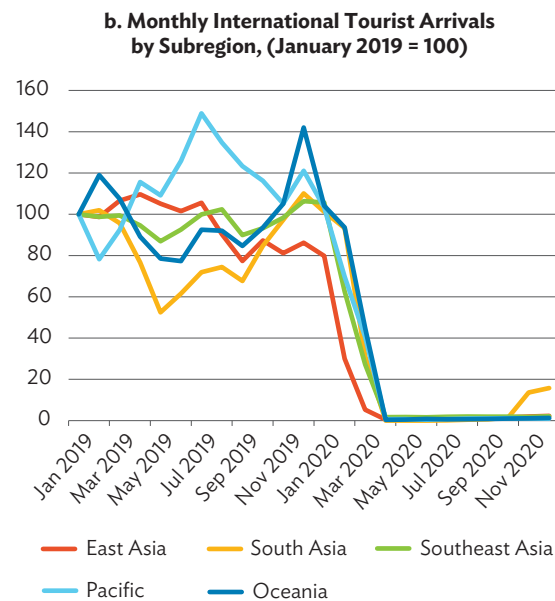
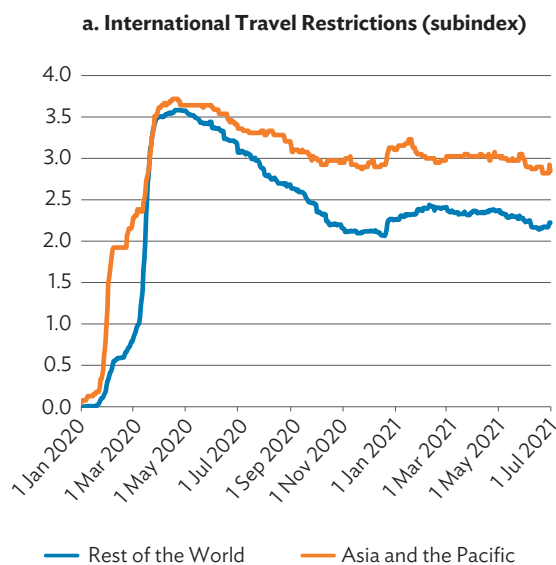
As Figure 1a shows, many Asian countries imposed strict travel restrictions from the start of the pandemic and barely loosened them in the course of 2020. The emergence of new variants of the COVID-19 virus in early 2021 led to a new wave of infections across various Asian countries. Several governments in the region therefore decided to tighten their measures and impose even stricter travel restrictions.

According to the latest data from the UNWTO, one in three destinations worldwide is now completely closed to international tourism. Asia and the Pacific is the most restrictive region, as almost two-thirds of all destinations impose complete border closures (UNWTO 2021b). Figure 1b shows a small increase in international tourist arrivals in South Asia, but it was solely driven by Maldives which opened its border to international tourists in July 2020. Given the spread of delta variant and renewed social distancing in many parts of the world, a substantive recovery of the tourism sector seems elusive for 2021.

Aside from border closures, if travel is permitted, countries often require lengthy quarantines. Quarantine requirements highly disincentivize people from traveling for nonessential purposes such as tourism. According to a survey conducted by the International Air Transport Association (IATA) (2021a), 84% of respondents claimed that they will not travel if there is a chance of quarantine at destination. The recent February 2021 survey result remains largely unchanged from the 83% recorded last September 2020.

¹ This brief was prepared by Matthias Helble, Cyn-Young Park, Won Hee Cho, and Sol Francesca Cortes. The brief has greatly benefited from comments from Benjamin Coghlan and Anna Fink.

Figure 1: International Travel Restrictions and International Tourist Arrivals



Notes: University of Oxford’s international travel controls record restrictions on international travel for foreign travelers: 0-No restrictions; 1- Screening arrivals; 2-Quarantine arrivals from some or all; 3-Ban arrivals from some regions; 4-Ban on all regions or total border closure.

The international travel controls index covers 186 countries (39 Asia and the Pacific and 147 Rest of the World).

Source: ADB calculations based on University of Oxford. Coronavirus Government Response Tracker. <https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker> (accessed 21 July 2021).

Notes: East Asia includes Hong Kong, China; Japan; the Republic of Korea; and Taipei,China. South Asia includes India, Maldives, Nepal, and Sri Lanka. Southeast Asia includes Cambodia, Indonesia, the Lao People’s Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam. The Pacific includes Fiji, Palau, Samoa, Solomon Islands, and Vanuatu. Oceania includes Australia and New Zealand.

Source: Asian Development Bank calculations based on CEIC (accessed 4 March 2021); Haver Analytics databases (accessed 27 July 2020); National Statistics Offices; and IMF (2020a, 2020b, 2020c, 2020d, 2021).

Despite numerous efforts to revive tourism, recovery has been slow.

With no immediate recovery in sight, governments have nonetheless been trying to support battered tourism industries. Various countries have tried to promote domestic tourism. Other measures included, but are not limited to providing subsidies, relaxing taxes, and issuing travel coupons and vouchers. For example, Japan launched the “Go To Travel” Campaign in July 2020, which offers discounts and subsidies up to 50% on domestic travel to boost domestic demand.

Promotion of domestic tourism and “travel bubbles” allowing travel to resume between certain destinations have been highlighted as potential strategies for driving recovery in the short term. However, where tried, these strategies have not been enough to bring travel back to pre-pandemic levels. Particularly for domestic tourism, situations remain volatile, as movement of people depends highly on the number of new COVID-19 cases. Further, domestic tourism is not enough to fill gaps left by international tourists, especially for countries that are highly tourism-dependent.

Added to the previously implemented strategies, vaccine passes seem to be an emerging solution to restart tourism.

On 8 December 2020, the first ever jab of the COVID-19 vaccine in the world was delivered in the United Kingdom. Even before the launch of COVID-19 vaccines, the idea of introducing “vaccine passes” was discussed and considered as a possible strategy to accelerate recovery of travel and tourism.

The passes have several advantages. With the sluggish and uneven progress of vaccine rollouts within and across borders, vaccine passes can offer significant health and economic benefits. A simple pass that shows a record of vaccination can be utilized for those vaccinated to resume normal socioeconomic activities, facilitating economic reopening sooner than later while still protecting those vulnerable to the spread of the pandemic until the communities and the countries reach herd immunity. Vaccine passes can also promote and incentivize vaccination, as they allow vaccination to link directly to more normal activities.

The use of vaccine passes is not new and does not have to be digital. The “International Certificate of Vaccination or Prophylaxis,” or simply the “Yellow Card” of the World Health Organization (WHO) has been used for many years when traveling to countries which require vaccination against diseases such as yellow fever.²

However, vaccine passes are not without challenges. First, there are gaps in knowledge and evaluation results about how effective any available COVID-19 vaccine is particularly with the emergence of new variants. Health experts say that vaccine effectiveness in preventing infection against different strains and limiting onward transmission, as well as the duration of immunity are yet to be fully known (Meredith 2021; University of Oxford 2021; and WHO 2021). Second, it is also not clear whether vaccine passes can effectively deal with the diversity of available vaccines and their idiosyncratic vaccination regimens. For example, vaccines from different manufacturers are viewed differently due to reasons such as geopolitics, assessments, and side effects (Marques 2021). Each vaccine has to follow a specific and clinically validated vaccine regimen to achieve the purported vaccine efficacy by the manufacturer. However, in addition to varying differences in external factors such as the integrity of cold chain, national policies at times have sometimes deviated from the required vaccine regime, which may affect vaccine efficacy or at least dampen public trust in it.

Currently, WHO does not recommend proof of vaccination as a requirement for international travel. Apart from the issues of vaccine efficacy, ethical issues surround the pass. It could lead to discrimination in relation to the right to freedom of movement. The disparity of vaccine access among economies can unnecessarily intensify existing pre-pandemic inequalities or create new ones (Gilchrist 2021).

Issues surrounding authenticity, security, and privacy are also a growing concern. Given current inequities in global vaccine supplies and lessons learned from past outbreaks where vaccines were scarce, such as yellow fever in Angola in 2016 (Reuters, 2016), there are worries that counterfeit passes could become a problem. Further, users may become hesitant to share their information for fear their personal data could be compromised (VOA 2021).

Finally, the biggest challenge is international coordination among different stakeholders—governments, international organizations, airlines, and even laboratories. For a vaccine pass to work, an internationally recognized standard for verification of vaccine authenticity and identity is needed. According to WHO, such passes should be made in compliance with International Health Regulations and should be recorded through the International Certificate of

Vaccination and Prophylaxis, regardless of the technology used. Vaccines used should also be approved by WHO. Should the pass be digital, technological considerations are essential to ensure interoperability and data security (WHO 2021).

Estimated Volume of International Travel Generated by the Introduction of a Vaccine Pass:

Scenario 1: Vaccination proceeds at current speed

Under the optimistic assumption that vaccine passes could be implemented worldwide and given the current trajectory of vaccine supplies, a full recovery of international travel could be seen only by 2023, at the earliest.

To estimate the potential of international travelers with vaccine passes, one needs to develop an estimate of the progress of the vaccination campaigns around the world and political arrangements being made between governments for travel bubbles. As have been observed in recent months, vaccination campaigns can be subject to delays and disruption. The baseline used for the estimation was the forecast by the Economist Intelligence Unit (EIU) on the expected end of the vaccination campaign around the world.

Recognizing the high level of uncertainty in the current context, forecasts are based on simple assumptions which include the following:

- the predicted rollout of COVID-19 vaccines of the EIU holds in scenario 1;
- the EIU divides economies into four categories as to the timing of achievement of herd immunity when 70% of the population have been vaccinated: (i) late-2021, (ii) mid-2022, (iii) late-2022, and (iv) from early 2023 onward;
- given the end date, it is assumed that vaccination would progress in a linear way until reaching herd immunity;³
- once people have been fully vaccinated, it is assumed that they would possess a vaccine pass to certify their inoculation, which would allow them to freely move again;
- to simplify the computation, it is assumed that people without a vaccine pass would not be eligible to travel internationally; and
- it is also assumed that people who had been vaccinated would have no restrictions to international travel (i.e., countries will accept incoming fully vaccinated travelers) and that people would travel internationally in the same proportion as before the pandemic (= 2019 levels).

Recent surveys indicate that people long to travel again after many months of restricted movements. Thus, demand for travel that is above historical trends can be seen for vaccinated people.

² Aside from allowing travel, such passes could unlock incentives in the domestic setting. Just like Israel’s “Green Pass,” a vaccine pass may eventually be needed to enjoy activities such as going to restaurants, gyms, and theaters, which have otherwise been restricted due to health precautions like social distancing (Gold 2021).

³ The use of exponential function to forecast vaccination progress has also been tried. However, for now, countries that have already achieved a high level of vaccination of their populations followed a rather linear path.

Under the outlined assumptions, the number of outbound travelers for all those economies have been estimated with EIU forecasts. The estimates for the Asian region include 17 selected economies, which accounted for about 85% of the total outbound international visitors in Asia prior to the pandemic. The estimates yielded that international tourism in Asia is likely to remain stagnant for 2021 (Figure 2). For 2022, a marked improvement with accelerating and broadening vaccine rollouts can be seen. However, the level would still be only about half of 2019. Based on projections made, the region would reach pre-pandemic levels by 2023 at the earliest.

Scenario 2: Vaccine delivery will be delayed by 6 months

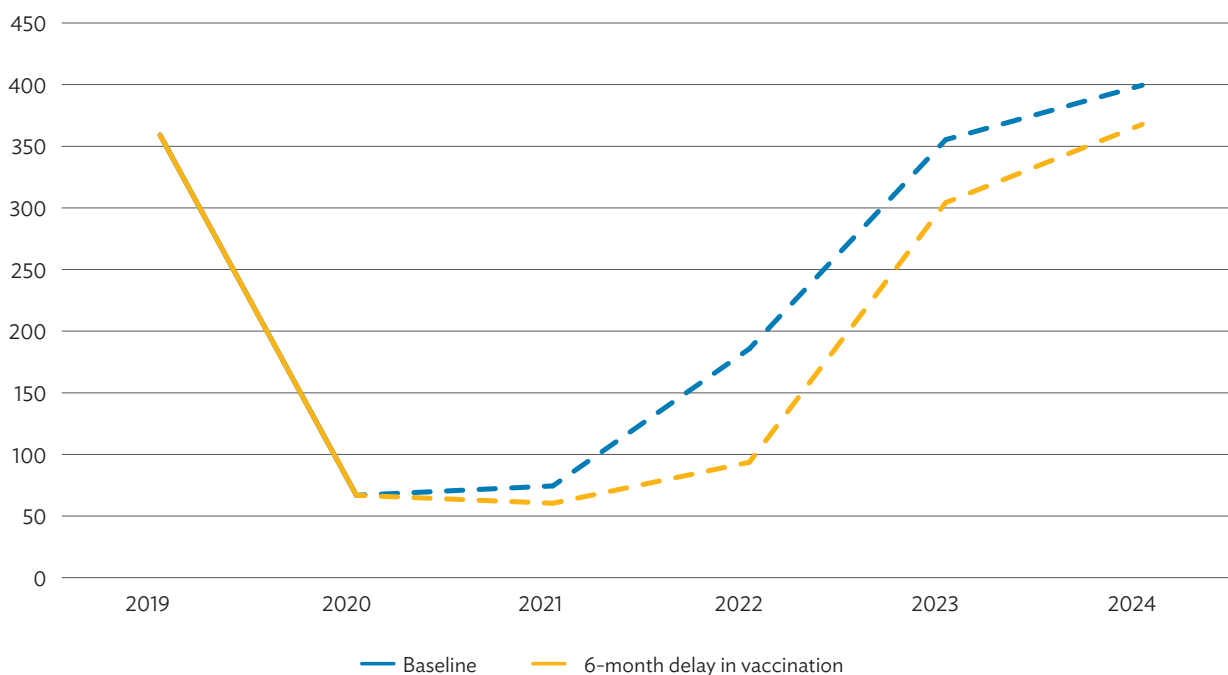
In an alternative scenario, it is assumed that vaccine delivery will be delayed by 6 months (Figure 2). As alluded to above, problems in the procurement and delivery of vaccines are likely. It is therefore assumed that the expected end date of vaccine delivery would be 6 months later for all countries in the sample made. This scenario could also be interpreted that it will take longer for an agreement of vaccine passes across countries. Irrespective of the

reason for the delay, it would lead to a significant postponement of the recovery of international travel. In this case, the year 2022 would still be only about a quarter of international tourists compared to the situation in 2019. The full recovery would only happen in 2024, at the earliest.

As vaccination is most likely to advance fastest in East Asia, the increase in the number of outbound travelers in Asia will most likely be led by these economies. In the study sample, East Asia contributed around two-thirds of total Asian travelers before the pandemic. As a source country, travelers from the People’s Republic of China (PRC) will likely remain the biggest absolute contributor post-pandemic.

Comparing Asia’s projected recovery progress with 65 selected non-Asian economies, Asia falls a few months behind (Figure 3). This is because most Asian and Pacific economies have been relatively slower than the rest of the world in making vaccines available to their people. Moreover, countries outside Asia and the Pacific commenced distribution of vaccines earlier.

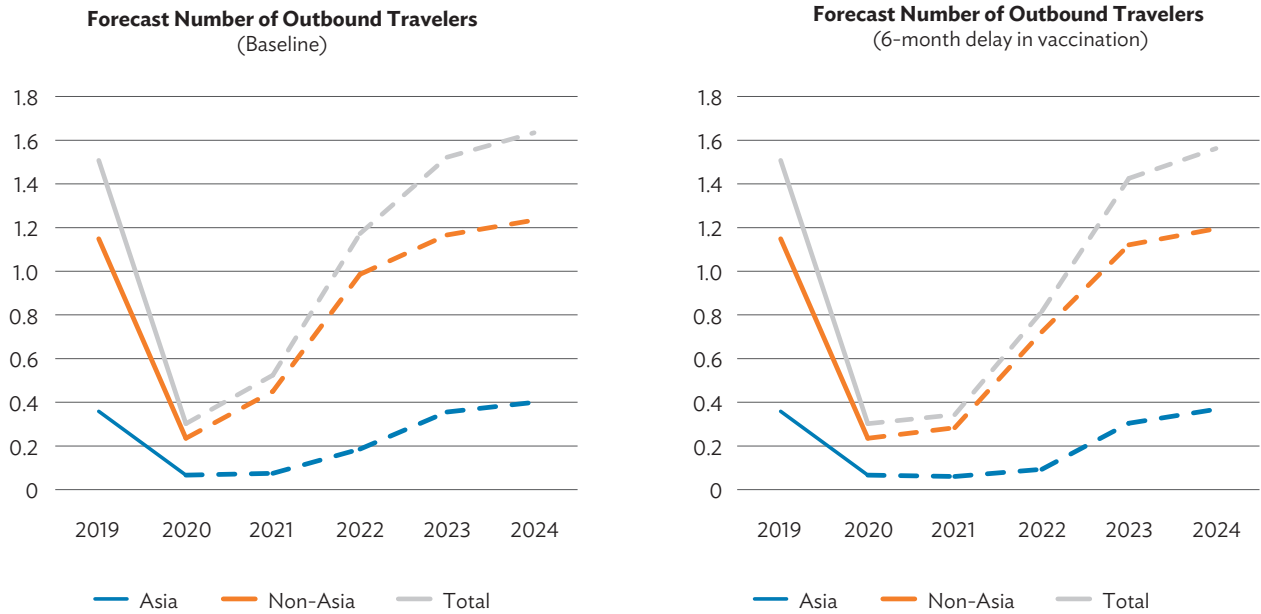
Figure 2: Forecast Number of Outbound Asian Travelers with Vaccine Pass (million)



Note: Only Asian and Pacific economies with sufficient data are included: Australia; Azerbaijan; Cambodia; Georgia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Lao People’s Democratic Republic; New Zealand; the People’s Republic of China; the Republic of Korea; Singapore; Sri Lanka; Thailand; and Viet Nam.

Sources: Asian Development Bank calculations based on Bloomberg (accessed 5 March 2021), Economist Intelligence Unit (27 January 2021), National Statistics Offices (accessed 5 March 2021), UNWTO Basic Tourism Statistics (accessed 5 March 2021), UNWTO Tourism Satellite Accounts (accessed 1 September 2020), and World Bank (accessed 5 March 2021).

Figure 3: Forecast Number of Outbound Travelers, with Vaccine Pass, Asia and Non-Asia (billion)



Notes: Only 17 Asian economies with sufficient data are included: Australia; Azerbaijan; Cambodia; Georgia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Lao People’s Democratic Republic; New Zealand; the People’s Republic of China; the Republic of Korea; Singapore; Sri Lanka; Thailand; and Viet Nam. Only 65 Non-Asian economies with sufficient data are included: Albania, Algeria, Argentina, Austria, Belgium, Bolivia, Brazil, Bulgaria, Canada, Chile, Colombia, Costa Rica, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, El Salvador, Estonia, Finland, France, Germany, Greece, Guatemala, Hungary, Iceland, Iran, Ireland, Israel, Italy, Jordan, Latvia, Lithuania, Luxembourg, Mexico, Moldova, Morocco, Netherlands, Norway, Oman, Panama, Paraguay, Peru, Poland, Portugal, Romania, Russian Federation, Saudi Arabia, Sierra Leone, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Togo, Tunisia, Turkey, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, and Zimbabwe.

Sources: Asian Development Bank calculations based on Bloomberg (accessed 5 March 2021), Economist Intelligence Unit (accessed 27 January 2021), National Statistics Offices (accessed 5 March 2021), UNWTO Basic Tourism Statistics (accessed 5 March 2021), UNWTO Tourism Satellite Accounts (accessed 1 September 2020), and World Bank (accessed 5 March 2021).

Assuming that vaccine passes are widely implemented, vaccine availability and efficient vaccine delivery would be a prerequisite to achieving the revival of the tourism sector.

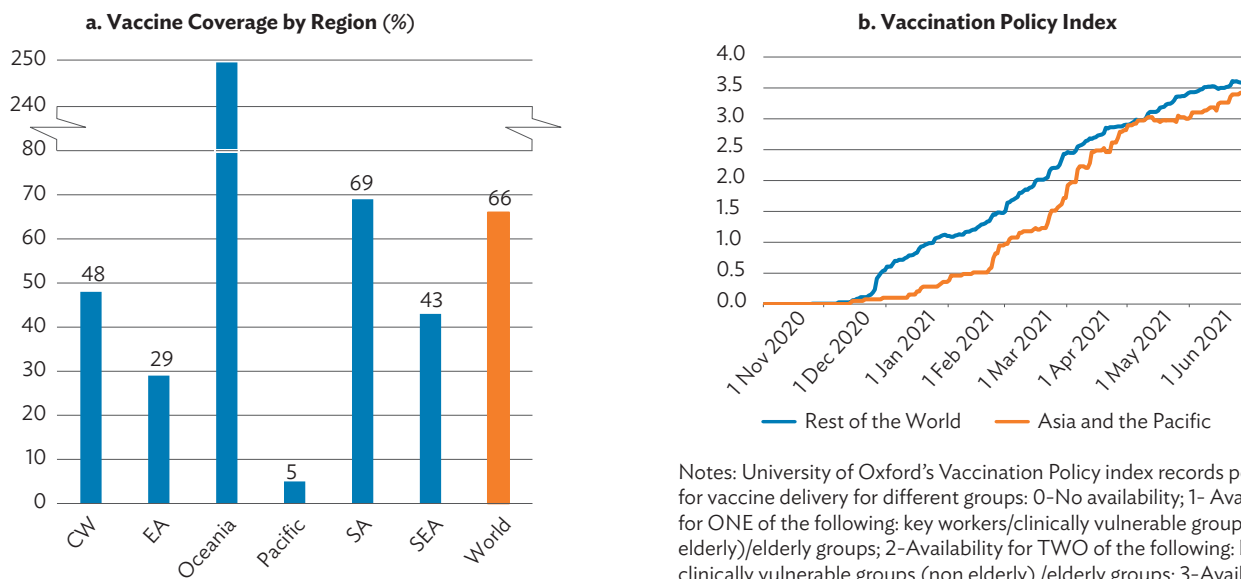
By early March 2021, 9.6 billion doses were under contract globally, according to Bloomberg (Figure 4a). By May 2021, the estimated number of COVID-19 vaccines to be produced in 2021 increased to over 11 billion (Airfinity, 2021). The reserved vaccines would supposedly be enough to cover more than half of the world’s population if the shots were to be distributed evenly. Nonetheless, high-income economies have secured extensive supply deals, leaving other countries short. Some countries might have to wait until 2022 or later before vaccine supplies become widely available.

As the Oxford’s vaccination policy index show, COVID-19 vaccines are now available to frontliners, clinically vulnerable, and elderly groups in many parts of the world, as the vaccine

availability has increased relatively quickly in a short span of time. Asia and the Pacific started out slower than the rest of the world, but has caught up in May 2021.

Pertinent factors, such as vaccine availability and the speed of widespread vaccine delivery, foreshadow the uneven recovery of tourism in both outbound and inbound travelers. Obviously, people residing in countries with a larger capacity to achieve vaccine goals would most probably be the first to be able to travel again. Likewise, countries that have achieved faster, widespread vaccination would more likely be first to open borders for international tourism and thus see their tourism sectors recover. Most likely, an unbalanced recovery can be seen wherein tourism between countries that have achieved herd immunity will flourish, while in economies with delays in vaccination, tourism (both outbound and inbound) will take longer to recover.

Figure 4: Vaccine Coverage and Vaccination Policy Index



CW = Central and West Asia, EA = East Asia, SA = South Asia, SEA = Southeast Asia.

Note: By early March 2021, Oceania (Australia and New Zealand) secured vaccine deals that could reach 249% of the population, but the speed of vaccination has been slow.

Source: Bloomberg. Covid-19 Deals Tracker. <https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/contracts-purchasing-agreements.html> (accessed 5 March 2021).

Notes: University of Oxford’s Vaccination Policy index records policies for vaccine delivery for different groups: 0-No availability; 1- Availability for ONE of the following: key workers/clinically vulnerable groups (non elderly)/elderly groups; 2-Availability for TWO of the following: key workers/clinically vulnerable groups (non elderly) /elderly groups; 3-Availability for ALL of the following: key workers/clinically vulnerable groups (non elderly)/ elderly groups; 4-Availability for all three plus partial additional availability (select broad groups/ages); and 5-Universal availability.

The vaccination policy index covers 186 countries (39 Asia and the Pacific and 147 Rest of the World).

Source: ADB calculations based on University of Oxford. Coronavirus Government Response Tracker. <https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker> (accessed 21 July 2021).

One caveat of the estimation made is that the effect of vaccination on family travel has not been considered. Families with children will continue to face difficulties in traveling as long as their children cannot be vaccinated. In early May 2021, the Food and Drug Administration expanded the emergency use authorization for the COVID-19 Pfizer vaccine to adolescents ages 12–15 in the United States.⁴ Pediatric vaccine trials are ongoing for children as young as 6 months old, wherein its possible emergency use authorization may be issued by late 2021 (Radcliffe 2021).

The number of people travelling with children is non-negligible, more so in the Asian region, as Asians take twice as many family trips as westerners. According to the “Family Travel Trends 2018” survey by Agoda, 18% of travelers globally take only one family holiday a year, while over 34% have taken more than five family trips in the past year. Asia dominates this trend, with a whopping 77% of family travelers from Thailand and 62% from the Philippines stating that they have taken five or more family holidays in the past year (Agoda 2018).

While there is no straightforward answer to whether or not children should travel during the pandemic, health experts recommend delaying travel until family members are fully vaccinated, as travel increases the chances of contracting and spreading the COVID-19 virus (Hanawalt, Adcock, and Orsini 2021).

VACCINATION AND TRAVEL

Currently, vaccine passes widely implemented have been predominantly only for domestic movements.

The introduction of vaccine passes for domestic travel has been pushed by governments around the world. Given that it can be undertaken without international coordination, those vaccine passes can be implemented relatively quickly. Israel, which leads on inoculation, has been one of the pioneers. Its Ministry of Health deployed the “Green Pass” in late-February, a vaccination certificate

⁴ Please also note that an expansion of the age range in developed countries could further constrain vaccine supplies in developing countries.

in both digital and paper form available to anyone who has received two doses of the COVID-19 vaccine (Fauzia 2021). By the time of the release of Green Pass, the state had administered jabs to half its population (The Guardian 2021). Malls and museums have reopened for everyone, but Green Pass holders have exclusive access to more “nonessential” establishments such as gyms, hotels, theaters, and concerts. The Green Pass scheme is allowing Israel to begin to get back to “normal.”

In early April, the United States Centers for Disease Control and Prevention announced that fully vaccinated people could travel within the United States without getting tested for COVID-19 beforehand or self-quarantining after (Mascarenhas and Howard 2021). The Centers for Disease Control and Prevention also released guidelines for international travel for both vaccinated and unvaccinated people.

Asian countries with an established vaccine pass include the PRC, India, Malaysia, and Singapore. In India, the CoWIN app is a platform for retrieval of vaccine certificates and for scheduling inoculation appointments, as it is integrated with different hospitals. CoWIN also has a dedicated website for certificate verification (Bhardwaj 2021 and CoWIN n.d.). Malaysia’s Immitee Health Passport, which was designed to ease border health checks, allows verification of both COVID-19 tests and vaccination. It is a secure, open-source system which uses blockchain technology and is available for governments and organizations to use with no charge (Sooi 2021). The PRC’s vaccination certificate and test results are currently embedded in social media via WeChat (CAN 2021). Despite having a provision for vaccine verification, the use of the app will first be for verification of COVID-19 tests (IATA 2021b). For these economies, there was no mention of using vaccine certification to increase domestic mobility.

Asian countries that plan to use vaccine certification include the Philippines, Thailand, and Viet Nam. Most, if not all, of these countries plan to use the pass for travel-related purposes. Vaccine passes can thus substantively help boost domestic tourism. However, as recent ADB research shows, domestic tourism, even when fully exploited, will not be enough to fill the gap left by international travelers in many economies, especially in highly tourism-dependent economies (Helble and Fink 2020).

To promote international tourism without waiting to conclude intergovernmental negotiations about the mutual recognition of vaccine passes, several countries have started to unilaterally allow entry of vaccinated foreign tourists. For example, in March 2021 the Thai government announced plans to let vaccinated foreign tourists enter the country without quarantine starting in October 2021 (CCSA 2021). The Government of Viet Nam is currently preparing similar measures (Tuan 2021). Thailand has also issued vaccine passes for Thais who wish to travel abroad (Bangkok Post 2021).

As some economies reach their domestic vaccination goals, they are offering vaccines to visitors. While there is no official definition

of vaccine tourism, an increasing number of people travel overseas to get vaccine shots. The United States has been producing and distributing more vaccines than any other country in the world. As many states offer the vaccines to non-residents or have loose monitoring, many tourists are flocking to the United States for COVID-19 shots. New York City and Alaska offer vaccines to visitors to boost both tourism and vaccination numbers. It is also said that Guam will consider vaccinating United States expats in Asia. In Asia, Maldives plans to launch a tourism campaign called 3V for “Visit, Vaccinate, Vacation,” offering vaccine on arrival for visitors.

Another strategy to attract international tourists proposed by some governments is to vaccinate populations in tourism destinations. For example, the Government of the Philippines plans to prioritize inoculations of local inhabitants of popular tourism destinations that can be geographically delimited, such as the island of Boracay. The hope is that such immunized bubbles would attract domestic and international tourists.

Finally, another option is to recognize international travel passes. For example, the Philippines is considering the IATA Travel Pass as a means to jump-start international tourism in the country (Rocamora 2021). In fact, Philippine Airlines is already scheduled to test the said trial pass on flights to Los Angeles and Singapore (Camus 2021).

Cross-border vaccine passes are in their nascent stages. Nevertheless, talks are ongoing and some countries have started executing plans.

Currently, countries have varying border entry requirements and quarantine measures upon arrival. Moreover, only a few countries recognize some sort of vaccine pass. For instance, as of early May 2021, the only cross-border vaccine pass is the Immitee Health Passport of Malaysia, which is recognized by Singapore (BusinessToday 2021 and Immitee n.d.). Singapore also recognizes the IATA Travel Pass (CNN 2021). After its successful trial, Singapore will be using the IATA Travel App starting 1 May to ease border control for those who wish to enter the country. Despite having a provision for vaccine verification, the use of the app will first be for verification of COVID-19 tests (IATA 2021b). Georgia allows everyone fully vaccinated to enter provided that certification of both shots is presented (Georgia Foreign Affairs 2021). Thailand has endorsed specific vaccine brands for tourists who wish to enter the country, and decreased quarantine requirements if the certification is uploaded to the foreign ministry website beforehand (The Strait Times 2021). Thailand has opened Phuket as a quarantine-free destination starting July 2021 for those fully vaccinated (TAT Newsroom 2021a,b). Meanwhile, the PRC, which first only allowed visa facilitation for those inoculated with Chinese vaccines (PRC Embassy 2021a) is now allowing entry to those vaccinated with Pfizer, Moderna, and Johnson & Johnson (Dou 2021, PRC Embassy 2021b, Reuters 2021).

At the regional level, the 10 Association of Southeast Asian Nations (ASEAN) country representatives discussed the possibility of a

common digital vaccine certificate during the ASEAN Economic Ministers meeting in early March 2021. The certificate would mainly seek to speed up recovery of the tourism sector and to facilitate movement of foreign workers (Iwamoto 2021).

Outside of Asia, the European Union (EU) proposed a privacy-friendly vaccine passport for use in the EU in March. Tourism-dependent countries, such as Greece and Spain, are looking forward to the “Digital Green Certificate,” which will be ready by June to accommodate summer travel (McMahon and Sampson 2021). The Digital Green Certificate is a digital proof that a person has either been vaccinated against COVID-19, received a negative test result, or recovered from COVID-19 (European Commission n.d.).

In summary, many countries are introducing vaccine passes, but very often develop their systems independently. Some are made to primarily free domestic movements, while some permit both domestic and international movements. In consequence, a vaccine pass in one country may not be recognized in another, requiring cross-border travelers to carry multiple apps or certifications. Several regional talks are ongoing; however, a uniform pass is not yet available.

Efforts to develop an international vaccine pass.

The private sector and other nongovernment initiatives have pushed strongly for the development of international vaccine passes. The International Chamber of Commerce was first to introduce a digital health pass called the AOKpass. Following the successful pilot launch of the AOKpass in May 2020 carried out by International SOS and Singapore company Energy Drilling Management, the pass was the first ever digital travel pass to be used by a national immigration authority to verify the COVID-19 status of inbound travelers in December 2020 (ICC 2020a, 2020b). Today, the pass is being used in other countries, such as Pakistan and the United Arab Emirates (Pifer 2020). Among other things, the pass features highly secure blockchain technology (AOKpass n.d.).⁵

Aside from the AOKpass, the Commons Project, World Economic Forum, and a broad coalition of public and private partners collaborated to launch the *CommonPass*, a platform that documents people’s COVID-19 status that satisfies country entry requirements (CommonPass n.d.). Following a successful trial with United Airlines in October 2020, four more major airlines, namely, JetBlue, Lufthansa, Swiss International Airlines, and Virgin Atlantic, joined the rollout (Pifer 2020). More recently, in Japan, Japan Airlines and All Nippon Airways announced that they were planning to begin demonstration flights for *CommonPass* soon (Travel Voice 2021).

Most recently, IATA launched its very own *IATA Travel Pass* in April 2021. The pass is a global initiative wherein a passenger uses a mobile application that contains certifications for COVID-19

tests or COVID-19 vaccines. Seventeen airlines around the world are part of the trial and, most recently, the first trial with Singapore Airlines was a success (IATA 2021c, 2021d, n.d.).

Several international schemes are in place which provide the option for a collective response. But, as yet, it does not appear that governments are falling in line with such schemes. Current efforts lack harmonized measures across borders.

POLICY RECOMMENDATIONS

Given that the speed of vaccination varies greatly across economies in Asia and the Pacific, tourism recovery is likely to be uneven across the region. Inclusive policies are important to ensure that nobody is left behind in the recovery.

Domestic level:

Introduce digital vaccine passes based on the latest technology.

To gain user confidence, fully secured and authentic data are essential. For instance, the use of blockchain technology (e.g., AOKpass) is gaining traction as it is known to be very safe against counterfeiting certifications or test results. It ensures that information entered into the system is unique and linked to only one individual. Aside from digital vaccine passes, governments need to ensure paper remains an option to ensure the inclusivity in health passes.

Continue to upgrade testing facilities at key exit and entry points.

Recent surveys show that tourists are putting a higher priority on health issues and safety measures than before. For example, a recent survey by the IATA indicates that 88% of passengers were willing to undergo a COVID-19 test as part of the travel requirements and 84% think a COVID-19 test should be required of all travelers (IATA, 2021). Testing facilities should be easily accessible at key exit and entry points and quickly deliver results.

Leverage public-private partnerships. Under a public-private partnership, the government’s role could be to accredit hospitals or clinics that could verify test results and certify immunization records, and to set guidelines on the implementation of vaccine passes. On the other hand, private firms could mainly contribute their expertise by creating safe digital passports.

*International level:*⁶

Tap digital tools and technologies for cross-border contact tracing.

Contact tracing combined with strict social distancing has been found to be effective in fighting the pandemic, as the cases of the Republic of Korea and the PRC show. However, privacy issues and technology challenges have limited the uptake and value of contact tracing apps in some jurisdictions. There may be scope for enabling contact tracing across borders. To do so, it is crucial

⁵ Blockchain is a technology that records information in a way that makes it very difficult to alter or hack.

⁶ Recommendations here are also cited in the blog by Helble and Cho (2021), discussing why vaccinations won’t necessarily lead to vacations anytime soon.

that governments adopt digital technologies that can accurately track movement of people without impinging upon data security and privacy, and that they allow an interface of exchange across countries. This could contribute to more convenient and efficient borderless and contactless travel, without having to download different applications for each country. The technology could be also based on the same platform as digital vaccine passes.

Agree on a harmonized protocol for vaccine passes across borders.

Harmonizing standards on a global scale may take time, but progress can be made first at the regional level as seen in the European Union. Similarly, Asia and the Pacific should work together to develop a common standard toward regional vaccine passes, which can substantially help to boost international arrivals. A common travel pass should be easy to use, fraud resistant, and available digitally. Existing regional integration efforts, such as trade deals and technical agreements, could offer a platform for further negotiation. Apart from easing travel substantially, offering a common vaccine passport would provide people with an additional incentive to become vaccinated. Furthermore, it would ease international business travel, which could support faster recovery of international economic cooperation.

Advance at the global level. Subregional or regional groups should effectively communicate with one another on their best practices and ensure interoperability of different systems. Negotiations on a harmonized global solution among governments should begin and, in the best case, lead to unified guidelines on the implementation of digital vaccine passes and other COVID-19-related measures. This would substantially contribute towards the recovery of the tourism sector.

Continue to allow entry for travelers without vaccine passes. As the vaccination programs are expected to take years to finish, entry into a country should continue to be possible for unvaccinated travelers. To facilitate travel, quarantine and testing protocols should be harmonized across the region. Currently, the quarantine and testing requirements for cross-border travel vary widely across the region. Common health protocols should also reflect the increased wish to have high health standards mentioned in IATA (2021).

Merge travel bubbles with vaccine passes. In early 2021, another form of international travel emerged: travel bubbles between economies that were largely COVID-19 free. This included bubbles for Australia–New Zealand; Singapore–Hong Kong, China; Singapore–Malaysia; and Singapore–Australia. However, most of these bubbles have recently closed due to concerns surrounding the spread of the delta variant.⁷ Once travel bubbles reappear, governments need to coordinate how to integrate these bubbles with vaccine passes.

Vaccine rollouts will be time-consuming, regionally and globally, but actions can be taken now that will make them more effective in opening tourism and travel. That could speed desperately needed economic recovery from the pandemic.

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