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Review Article

A risk balancing act – Tourism competition using health leverage in the COVID-19 era

Victor Grech[a,*], Peter Grech[b] and Stephanie Fabri[c]
[a] *Paediatric Department, University of Malta, Mater Dei Hospital, Malta*
[b] *Accounting and Economics Student, Malta*
[c] *Faculty of Economics, Management & Accountancy, University of Malta, Malta*

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Abstract. The world is currently in the throes of the COVID-19 pandemic which has halted the tourism sector and created an unprecedented global economic crisis. This paper will outline economics pertaining to COVID-19 lockdown, recovery and the inevitable competition that will occur between countries for tourists who will be scarcer and therefore more valuable. Countries are competing with a variety of incentives in order to lure visitors. However, persistent first waves that extend into July will put off tourists, further reducing tourism revenues and accelerate job losses and bankruptcies in affected countries. The example of Sweden's response to COVID-19 in this regard will be described. Countries that have COVID-19 relatively under control but experience second waves will also manifest negative tourism effects. Governments and public health must act in unison so as to exit lockdown as speedily and as safely as feasible, with COVID-19 rises that are as low and brief as possible in order to better compete in the tourism sector with other countries. Websites are already online comparing not only safety for travellers vis-à-vis COVID-19 but also the incentives offered by different countries in their attempts to woo tourists in this difficult market.

Keywords: COVID-19, tourism, economics, recession, Internet

1. Introduction

The world is currently in the throes of the COVID-19/coronavirus pandemic that was initially identified in Wuhan, China, in December 2019 [1]. This has resulted in a global crisis for the tourism and hospitality sectors. With international travel bans affecting over 90% of the global population accompanied by social distancing measures, tourism effectively ceased in March 2020.

These measures were effective. A modelling study has estimated that lockdown measures implemented between 2 and 29 March 2020 may have averted 3.1 million deaths across 11 European countries [2]. The measures varied but included social distancing, banning large gatherings, closing schools, and stopping all but essential travel, thereby reducing COVID-19's reproduction value (R0 value) to <1, from circa 0.44 in Norway to 0.82 in Belgium with a European average of 0.66, a >80% reduction of R from the figure

*Address for correspondence: Victor Grech, Paediatric Department, University of Malta, Mater Dei Hospital, Malta. E-mail: victor.e.grech@gov.mt.

before the lockdowns [2]. Another study estimated that these measures as implemented in China, South Korea, Italy, Iran, France, and the US prevented/delayed circa 530 million infections [3].

This paper will outline the economics pertaining to COVID-19 lockdown, recovery and the inevitable competition that will arise between countries for tourists since the supply side and the demand side of the tourism industry equilibrium has been disrupted: tourists will be scarcer and therefore more valuable exerting an economic recessionary shock on tourism markets.

Countries are competing with a variety of incentives in order to lure visitors. However, persistent first waves that extend into July will put off tourists, further reducing tourism revenues and accelerate job losses and bankruptcies in affected countries. The example of Sweden's response to COVID-19 in this regard will be outlined. Countries that have COVID-19 relatively under control but experience second waves will manifest the same negative tourism effects. Governments and public health must act in unison so as to exit lockdown as speedily and as safely as feasible, with COVID-19 rises that are as low and brief as possible in order to better compete in the tourism sector with other countries. Websites are already online comparing not only safety for travellers vis-à-vis COVID-19 but also the incentives offered by different countries in their attempts to woo tourists.

2. Continuing impact on tourism

Most countries worldwide are coming out of lockdown. However, because of decreased connections, inflight social distancing (with airplanes only half filled at "full" capacity) and other restrictions on the industry due to the continued presence of the virus [4], the United Nations World Tourism Organization (UNWTO) estimates huge tourism declines in 2020 with trillions of dollars in revenue losses [5], as international tourism is set to plunge by 80% [6].

For these reasons, the World Travel and Tourism Council (WTTC) noted that COVID-19 is exerting a domino effect on the entire global economy, threatening the livelihoods of 300 million people – one in 10 of the global workforce – employed in the tourism/hospitality industry, an industry which accounts for 300 million jobs and almost 10% of global GDP [6].

3. The world economy and COVID-19

Gross domestic product (GDP) is defined as the total amount of goods produced and services provided, typically quoted or cited per country, for a one year period or for quarters [7]. Annual growth is given as a percentage of the previous year's GDP. The world's GDP (the Gross World Product) was $85.9 trillion in 2018 [8]. Just for perspective, the largest economy in terms of GDP is that of the US at almost $19.5 trillion/year [9]. The annual budget of this country for 2019 was almost $4.45 trillion [10].

So far, in order to assist economies because of the deleterious effects of COVID-19 and thereby attempting to avoid a recession of the sort witnessed in the 1930s during the Great Depression [11], developed countries such as the US and countries that form part of the EU, amongst others, have pledged various stimulus packages. For example, the US Federal Government has already vouchsafed more than $6 trillion in internal aid [12]. The Federal Reserve Bank (the country's central bank) has effectively pledged to do whatever it will take to keep the economy afloat and will not hold back from economic stimulus (borrowing and cash injection): "We're supposed to be pursuing maximum employment and stable prices, and that's what we're pursuing" [13]. But it remains to be seen whether these measures will be effective [14]. Most countries have implemented similar measures, such as a $1 trillion stimulus/assistance package for the European Union [15].

Most countries barring some maverick exceptions (such as Brazil – with now catastrophic COVID-19 death rates [16]) have instituted varying levels of lockdown, an amorphous term, which includes quarantine measures and social distancing. The imposition of these measures ranged from the relaxed approach adopted by Sweden [17], to the partial version adopted in Malta [18,19], to the total lockdown instituted in India [20]. The more draconian the restrictions, the worse the job losses and bankrupt businesses [21]. Such measures naturally impact on each country's economy, an effect which is measured as a GDP contraction [21].

The Organisation for Economic Co-operation and Development (OECD) has forecast that the world economy will shrink 6% in 2020 [22]. Virtually all countries (not only the US) are scrambling in damage control efforts so as to (to put it crudely) minimize the impact on their GDP [23].

4. First wave and Sweden

At the time of writing, several countries are barely in control of COVID-19, while others (such as Malta) have been in very good control from the outset, with effective lockdowns [19]. Sweden has been a European outlier whose State epidemiologist Anders Tegnell of the Public Health Agency of Sweden calmly seemed to be steering the country through the crises with impunity despite a laid-back attitude to social distancing, an approach that he claimed would relatively quickly lead to herd immunity [17]. Herd immunity is the point at which so many people have immunity to a virus (through past infection or vaccinations) that with too few people to infect, the virus can no longer spread rapidly [24]. In the absence of a vaccine for COVID-19, 60% of the population would have to become infected (and recover) from COVID-19 in order to achieve herd immunity, and this assumes that every infected patient gains effective immunity that does not rapidly wane [25].

In Sweden, no mandatory quarantine was applied, museums, bars, restaurants, gyms, malls, schools and nightclubs remained open and residents were encouraged to follow guidelines for personal hygiene and social distancing. Gatherings of 50 or more people were banned, and residents were advised to avoid nonessential travel. People over 70 were encouraged to stay home. In late March, visitors were prohibited from visiting nursing homes [17]. However, these measure did not prevent COVID-19 from reaching elderly care facilities [26]. The consequences were catastrophic. By 3 June there were 4542 COVID-19 related deaths in Sweden, versus 580 in Denmark, 321 in Finland, and 237 in Norway, with deaths per 100,000 population of 44, 10, 6 and 4 respectively [26].

Swedish Prime Minister Stefan Löfven admitted that "when it comes to elderly care and the spread of infection, [it] has not worked. Too many old people have died here" [27]. Tegnell agreed "There is quite obviously a potential for improvement in what we have done in Sweden" [27]. Disappointingly, despite the high infection and mortality rate, only about 7.3% of the population in Stockholm (the most severely impacted town in Sweden) developed COVID-19 antibodies (by early May in an antibody survey) [28]. This applies across the board to all countries, with estimated total population infection rates to date ranging from 1% in Norway, Germany, and Austria to 8% in Belgium, with <4% overall for these countries [2].

The outcome at the time of writing is that Nordic countries are in the process of opening borders to each other – but not to Sweden [29]. The economic advantage of this course of action has not been advantageous for this country. Sweden's 2020 first quarter GDP suggests better performance overall than the EU with a decline of 0.3% vs 3.8% for the Eurozone. However the European Commission forecasts that Sweden's GDP will fall by 6.1% this year, while the country's central bank predicts a 7–10% fall, on par with the rest of the world [30].

5. Second and more waves

COVID-19 is a betacoronavirus, and is thus very different from influenza. However, its transmission epidemiology is similar to flu and it is therefore salutary to review past influenza pandemics as viral transmission models. Most influenza pandemics have followed wave patterns, with a peak usually succeeded by a second wave around six months later [31]. In the case of COVID-19, it has been speculated that as lockdowns are raised, infections will rise again, followed by declines as lockdowns (in various degrees) are re-imposed, and so on, leading to successive waves whose amplitudes are determined by various factors including herd immunity and stringency of applied lockdowns [32]. More recently, the risk of a second wave has been estimated to be very real [33], with the public being regularly cautioned as for example by the UK business secretary, Alok Sharma: "the worst thing we could do now is ease up too soon and allow a second peak of the virus ... Now is not the time to let up. The risk still persists–not only for yourself, but for the people around you. So we must stay vigilant" [34].

But it is important to keep in mind that a country's failure to dampen a first wave or the recurrence of COVID-19 in a second wave will both serve as disincentives for potential tourists.

6. Raising lockdowns

All countries are now attempting to step out of lockdown so as to adjust to a "new normal" and restart their economies [35]. This naturally raises the risk/spectre of second waves [33], a balancing act between reviving economies and morbidity/mortality from COVID-19. Health issues are particularly relevant as it has been estimated that in the developed countries, if GDP drops to circa 6%, more years of life would be lost due to recession than would be gained through lives saved at this tipping point as there is a link between GDP and life expectancy since affluent countries are able to spend more on healthcare, safety and the environment. This spend would be restricted due to decreased funds available if GDP falls [36].

There is thus a trade-off between lifting lockdowns and restarting economies so as to dampen economic recessions as this will result an upsurge in numbers of infections that preferentially negatively affect the most vulnerable. As averred by Nobel Prize winning economist Paul Krugman, "How Many Will Die for the Dow?" [37].

7. The status quo

Some countries that have lifted lockdown have already started to experience their second waves and these include Iran and the US [38,39]. As reported in Reuters:

> Facing budget shortfalls and double-digit unemployment, governors of U.S. states that are COVID-19 hotspots on Thursday pressed ahead with economic reopenings … governors … said the United States could not afford to let the novel coronavirus shut its economy again … Governors of hotspot states face pressure to fire up economies facing fiscal year 2021 budget shortfalls…a second shutdown of the economy was "not under discussion" despite official figures showing a 211% rise in virus cases over the past 14 days [39].

Second waves and fears of a slow economic recovery caused the global stock markets to fall rapidly [39]. Despite these scenarios, perhaps because of smaller COVID-19 numbers overall the European Union is insisting that travel returns to normal as soon as possible [40], possibly through the use of 'travel corridors' [41], so as to start to restart the European economies.

Table 1
European countries ranked by percentage of GDP accrued from travel and tourism [42]

Country	% GDP travel and tourism
Croatia	25.5
Montenegro	24.6
Malta	23.0
Cyprus	21.4
Estonia	20.4
Greece	17.2
Spain	17.2
Portugal	15.7
Albania	14.7
Austria	14.5
Iceland	13.3
Slovakia	12.6
Switzerland	12.6
Bulgaria	12.0
Slovenia	11.9
France	10.9
Czech Republic	10.4
Bosnia Herzegovina	10.3
Armenia	10.2
Italy	9.7
UK	9.2
Belgium	8.9
Finland	8.9
Germany	8.6
Denmark	8.5
Luxembourg	8.1
Poland	7.7
Latvia	7.5
Netherlands	7.4
Ireland	7.3
Sweden	7.1
Hungary	6.7
Lithuania	6.2
Macedonia	6.1
Norway	6.1
Romania	5.8
Serbia	4.7

8. Staycation incentives

Internationally, country-dependence on tourism varies (Table 1) [42]. Some countries have started to apply local stimuli to their hospitality industries. Staycations are important for each individual country as while borders open, as the anticipated flow of tourism is expected to be low, domestic tourism is an essential component for economic recovery.

The Maltese Government for example will give every resident aged 16 and over five vouchers of €20 each. Four of the vouchers may be used in Malta Tourism registered hotels and restaurants and the remaining €20 voucher in retail outlets which were closed because of the COVID-19 measures [43]. Belgium eased lockdown with 10 free train tickets for every citizen so as to encourage staycations [6].

Plans in development in Japan include incentivizing domestic tourism with cheap travel and discounts offering up to $184 a day in subsidies and vouchers. A proposal in Switzerland could give every citizen $200 to spend on holidays at home. These two proposals will cost the respective countries circa $12.4 and $1.17 billion [6].

Even then, with family budget constraints due to loss of earnings, vacations may be shorter and vacationers may economize on specific attributes of their holiday as a consequence of the global negative economic shock [44].

9. International travel

Tourist destination choice depends not only on "distance to the destination" and "prices of the destination" but also on tourist motivations at the moment of choosing a destination [45]. Furthermore, these additional motivations may have a direct (increasing the dissuasive effect) or inverse (reducing the dissuasive effect) moderating effect on these choices [45].

It is therefore anticipated that apart from the usual factors that decide where holidays are taken, decisions will also be influenced by two factors additional, incentives to woo visitors even in the presence of COVID-19 and perceived destination safety, both of which will need to overcome the more onerous airport experience which will accommodate the tenets of social distancing [46].

The industry will also have to manifest "resilience", a concept first introduced in the sciences and later to social sciences, such as psychology, sociology, business administration and economics. The term describes the way in which complex entities respond to adverse shocks [45]. Tourism is a complex phenomenon, and consists of several complementary goods and services and all must adapt to survive these trying times since contractions of both international and domestic segments has occurred.

In order to survive, it may be salutary for countries and companies to review the events of the American financial crisis, the "Great recession", an aggregate shock that negatively impacted the entire world economy, starting in 2008, which had similar (albeit lesser) global effects. In 2009 world per capita GDP decreased by circa 3.4%; tourist arrivals globally declined by circa 3.8%, and tourism receipts are estimated to have declined by 9.4% [47].

With regard to traveller incentives, these are varied and inventive. Some travel companies are already cutting prices up to 2/3 so as to restore confidence and entice holidaymakers. For example, from the UK, these are some overseas packages at the time of writing [46]:

- A week's all-inclusive at Tui Blue Atlantica Bay, Cyprus costs £674pp (tui.co.uk)
- A week's all-inclusive at Tui Sensatori Atlantica Dreams resort, Greece costs £769pp (tui.co.uk)
- A weeks all-inclusive at Ibiza's Invisa Figueral resort, from £545 (jet2.com)
- A week's all-inclusive at Hotel Alborada Ocean Club, Tenerife costs £295 (loveholidays.com)
- Two nights at the Hôtel Romance Malesherbes in Paris in September: from £79 (travelzoo.com)
- A week at Anseli Hotel, Rhodes, from £195 with flights (easyjet.com)
- A week's self-catering at Turkey's Agar Apartments: from £248 (jet2.com)

Cyprus is offering to cover costs of holidays affected by coronavirus, including accommodation, food and medical costs while they are quarantined [6]. Mexico's hotels are providing free nights and car hire [6]. The #Come2MexicanCaribbean campaign is timed to coincide with the reopening of Mexico's borders later in June, and will include free hotel stays for children, discounts on car rental, and offers at theme parks and golf courses [6]. Mexico's Caribbean coast resorts are offering a "stay two nights, get two free" offer at hotels in destinations such as Cancun, Cozumel and the Grand Costa Maya [6].

A more practical (albeit less glamorous) tack which may not only prevent incoming infections but also reassure potential tourists is testing on arrival. The Portuguese island of Madeira as well as Iceland are offering free coronavirus tests to visitors when its borders reopen to international tourists on 1 July [6]. Some beaches are also preparing physical social distancing measures in an effort to increase their attractiveness [48].

Naturally, all countries will be competing with a limited supply of tourists, for a relatively short period, upcoming spring and summer 2020, while cognizant of the fact that a significant second wave will inevitably undermine potential tourists' confidence [33].

For these reasons, websites have already sprung up purporting to provide information vis-à-vis countries' added value in terms of price and perks [49] and relative safety. One website pragmatically claims:

> We have selected for you some of the destinations least affected by Covid-19 (up to 600 times fewer Covid-19 cases). These destinations have also implemented very specific protocols concerning hygiene in accommodations, restaurants, shops and measures such as the change of air conditioning filters between each traveller stay, availability of masks and social distancing. These destinations also benefit from proximity to hospitals and have a higher number of hospital beds per inhabitant than the majority of European countries [50].

10. Conclusion

Persistent first waves that extend into July will put off tourists and further significantly reduce tourism revenues and accelerate job losses and bankruptcies in affected countries. These countries will need to restrain COVID-19 spread very quickly in order to benefit from summer 2020 tourism. Countries that have COVID-19 relatively under control and who experience second waves will manifest the same negative effects. These countries may be able to avoid a second wave or dampen it by releasing restrictions slowly, per WHO criteria if:

(1) Evidence shows COVID-19 transmission is controlled;
(2) Public health and health system capacities are in place to identify, isolate, test, trace contacts and quarantine them;
(3) Outbreak risks are minimized in high-vulnerability settings, particularly in homes for older people, mental health facilities and crowded places of residence;
(4) Workplace preventive measures are established, including physical distancing, handwashing facilities and respiratory etiquette;
(5) Importation risks can be managed; and
(6) Communities have a voice and are aware, engaged and participating in the transition.

Governments and public health must act in unison so as to exit lockdown as speedily and as safely as feasible, with COVID-19 rises that are as low and brief as possible. This may be possible by maintaining social distancing, hygiene and the rigorous use of face masks in public areas: “my mask protects you, your mask protects me” [51].

Conflict of interest

None to report.

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