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## What Impact Would A Global Spread Of Ebola Have On The Credit Quality Of Airports In Asia-Pacific And Europe?

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## Table Of Contents

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Looking Back At The Impact Of SARS

What If Ebola Was To Spread Outside Western Africa And Start Affecting Propensity To Travel?

# What Impact Would A Global Spread Of Ebola Have On The Credit Quality Of Airports In Asia-Pacific And Europe?

With the current outbreak of the Ebola virus attracting headlines worldwide, particularly since cases were found outside Western Africa, would a more widespread outbreak of Ebola result in people reconsidering their travel plans? Although we have no insight on, nor are we speculating about, the likelihood of Ebola spreading outside Western Africa and the potential impact that might have, we have assessed the potential impact on the credit quality of the Asia-Pacific and European airport sectors if a hypothetical scenario of Ebola spreading globally was to occur. Importantly, our hypothetical scenario is simply looking at the impact that a temporary drop in international passenger numbers could have on the airports, and we are not speculating about the potential flow on impact--if any--on GDP that a spread of Ebola globally could have.

## OVERVIEW

- We believe a hypothetical temporary drop of international passenger numbers in 2015 would have limited impact on the airport sector in Asia-Pacific and Europe.
- In Asia-Pacific, that would be because of three main reasons: (i) an assumption of continued growth of domestic passenger numbers, (ii) the diversity of revenue stream, which may not be directly correlated to passenger numbers, and (iii) some headroom in credit metrics for most companies.
- In Europe, that would mainly be because of the headroom in the credit metrics of most rated airports, as well as our view that intra-European travel would not be affected as much as international travel would be.
- Also supporting our view of a limited impact is the fact that companies in the sector have demonstrated willingness in the past to support their credit quality during stress, through investment deferral and lower dividend disbursement.

## Looking Back At The Impact Of SARS

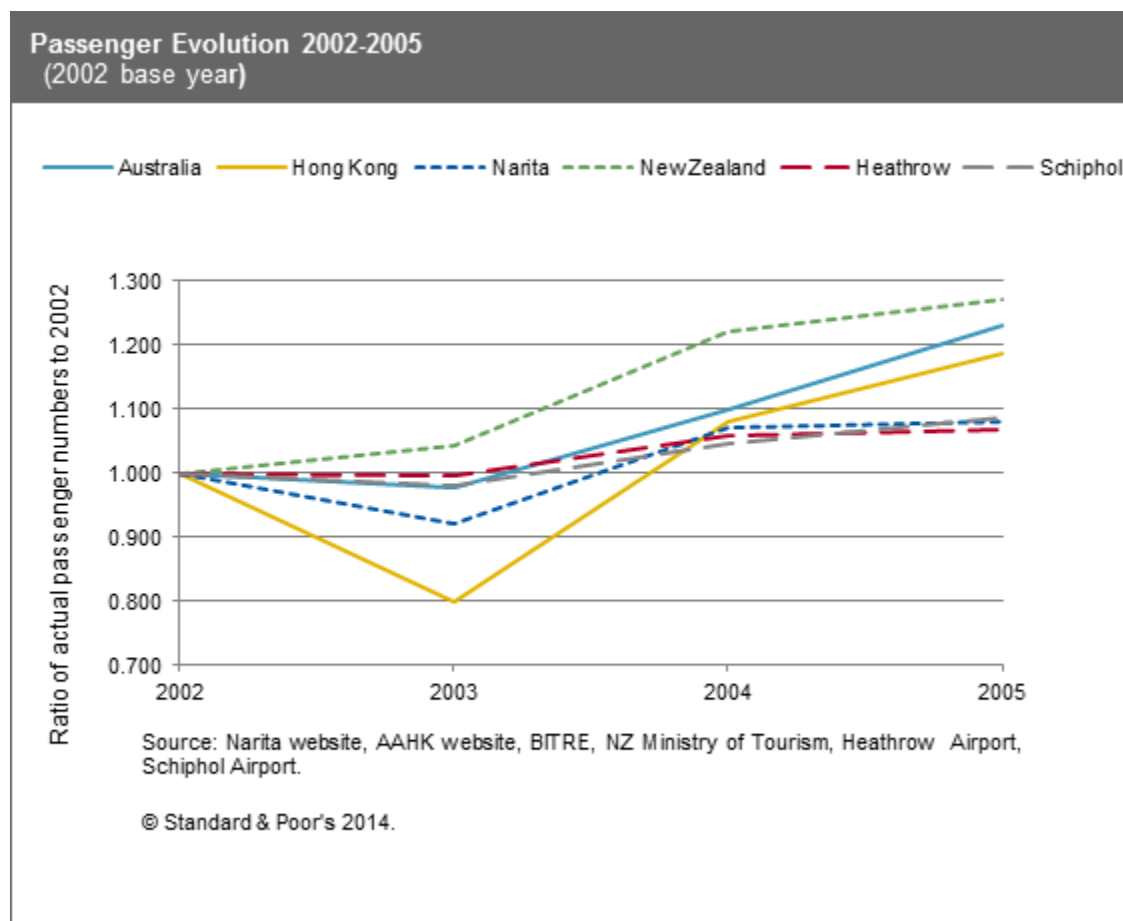
Given the difficulty of quantifying the impact of a global Ebola spread, we have instead looked back at similar events to ascertain how a global health scare affected air travel in the past. The Severe Acute Respiratory Syndrome (SARS) epidemic, which occurred in 2002/2003, offers in that respect a very good parallel. By way of background, the SARS outbreak was primarily centered in parts of southern China but cases were seen elsewhere, in particular Canada, Taiwan, and Singapore. During the height of the epidemic airport passenger volumes decreased significantly, with the airports located close to the affected area feeling it the most. For example, Hong Kong Airport saw passengers dropping by about 20% in 2003 and Beijing Airport passenger numbers were down 10%. The impact was lesser further away from the affected areas, with declines of about 4%-8% across the rest of the Asia-Pacific region. A key takeaway from the SARS outbreak, though, was the speed at which passenger numbers recovered not only in terms of year-on-year growth but also in actual number of passengers. Narita Airport, in Tokyo, saw passenger numbers increasing by 16% in 2004 to a total number that was higher than pre-SARS. In the same period, Hong Kong grew

26%, and Australian airports grew 12%, and in both cases total passenger numbers were higher than pre- SARS levels.

In Europe, the effect of SARS was muted overall. Passenger volumes at major airports suffered only to a low-single-digit extent, and temporarily so. London's Heathrow airport saw passenger volumes dropped 0.3% in 2003, because the SARS epidemic did not affect London, and also because high capacity utilization means that demand for flying out of Heathrow is not being fully satisfied during normal times. This latter reason underpins our view that Heathrow would be the least affected of the European airports if Ebola spread more widely, unless an Ebola epidemic became very serious in London and the east coast of U.S.

In Amsterdam, Schiphol airport, with its higher number of connections to the more affected south east Asian region, suffered from the SARS episode more than Heathrow did. The impact was still limited, however, with passenger volumes dropping by 1.9% in 2003. Both Heathrow and Schiphol showed quick and strong recovery in 2004, with passenger volumes growing by 4%-6%.

**Chart 1**



What the SARS outbreak demonstrated was that any potential reluctance to fly due to extraneous reasons would appear to be short-lived, and would not appear to cause any long-term loss of passengers--instead, it would appear that people would simply postpone their travel.

## What If Ebola Was To Spread Outside Western Africa And Start Affecting Propensity To Travel?

One key consideration when trying to make a parallel between the SARS and Ebola outbreaks is the fact that SARS originated in the heart of Asia, and the impact on passenger numbers during the SARS outbreak was directly correlated to the number of passengers that would have otherwise travelled through the primary affected areas of southern China and Hong Kong. In the absence of a significant outbreak of the disease in the Asia-Pacific region, one could conclude that Ebola, irrespective of the number of cases that might be discovered outside Africa, could have only a very limited impact on the Asia-Pacific airports. This reflects the very low number of passengers to and from western Africa travelling through the Asia-Pacific airports.

One unknown factor, though, is how travelers would react to such cases spreading globally and the fear of potentially sitting next to someone affected by the disease in the context of no known cure and what appears to be higher mortality rates compared to SARS. Saying that, unlike SARS, Ebola would appear to be transmitted through direct contact rather than being airborne.

### The scenario

Based on these observations, we have analysed a hypothetical scenario whereby Ebola spreads globally and affects all airports. Key assumptions for that scenario would be a 10% drop in international passenger numbers during 2015, recovering to 2014 levels by the end of 2016. The catch-up year would be 2017, when passenger numbers would return to levels we are currently forecasting sans the hypothetical pandemic. For European airports we have assumed intra-Europe travel to decline by 5%, recovering by 2016.

Although the rate at which passenger numbers are recovering in our hypothetical scenario would appear somewhat slow compared to the recovery rate post-SARS, we have adopted this assumption merely to assess the extent of a prolonged impact—typically, in the airport sector we see that temporary negative fluctuations resulting from extraneous events have a quick recovery, and they do not usually affect our existing view of the creditworthiness of companies in that sector.

In our theoretical scenario, we have focused solely on international passenger numbers, given our view that domestic travel is typically more resilient to such extraneous global events.

### Impact on the sector

Based on our hypothetical scenario, we believe that the sector as a whole would not be materially affected and the overall credit quality would remain somewhat stable.

**Table 1**

Potential Financial Metrics Impact Of A Global Ebola Crisis			
Potential Rating Impact	Potential Financial Metrics Impact		
	Low	Medium	High
Low	Adelaide	Sydney	DME (Moscow)
	Wellington	Melbourne	
	Christchurch	Hong Kong	

**Table 1**

Potential Financial Metrics Impact Of A Global Ebola Crisis (cont.)		
	AdR (Rome)	Narita
	Dublin	Auckland
	Zurich	AdP (Paris)
	Gatwick	
	Heathrow	
	Schiphol	
Medium	Perth	Brisbane,
	Avinor (Norway)	Khabarosky (Russia)
High		

The potential earnings (and therefore financial metrics) impact and the potential rating impact reflect two key factors:

The diversity of revenue, which relates to the degree to which certain revenue streams of an airport may not be correlated to passenger numbers; and

The extent to which the total passenger base of an airport is exposed to international traffic. It should be noted that the exposure to international traffic for airports in Australia and New Zealand does not differentiate between trans-Tasman travels (between Australia and New Zealand) and trips elsewhere to Asia, Europe, or North America. We believe that trans-Tasman travel could be less impacted than long-haul flights.

**Table 2**

Airport Revenue Diversities & International Traffic Flows		
	Revenue diversity	Exposure to international traffic (excluding intra-Europe)
Adelaide	Low	Low
Aeroporti di Roma	Medium	Medium
Aéroports de Paris	High	High
Avinor	Medium	Medium
Auckland	Medium	High
Brisbane	Medium	Medium
Christchurch	High	Low
DME	Medium	High
Dublin Airport Authority	Medium	Low
Flughafen Zurich AG	High	Medium
Gatwick Funding Ltd.	Medium	Low
Heathrow Funding Ltd.	High	High
Hong Kong	Medium	High
Melbourne	High	Medium
N.V. Luchthafen Schiphol	High	High
OA O Khabarovsk Airport	Low	Low
Narita	Low	High
Perth	Medium	Low
Sydney	High	Medium
Wellington	Low	Low

There remain, however, some outliers.

- Australia's Perth and Brisbane: while the revenue mix and exposure to international traffic would initially infer a potentially low rating impact, these two airports are currently undertaking large capital expenditure programs (the development of new terminals in Perth and the construction of a new runway in Brisbane). These very large capital outlays mean that we expect these two airports to have limited buffer in their financial metrics over the near term. Any impact on earnings, even if moderate, could therefore affect our view on their credit quality. Saying that, our assessment of the potential rating impact does not factor in any measures each company could take to support their credit quality. In fact, both being privately held (and therefore having potentially less pressure on ongoing dividend payments compared to listed companies) and given their track record, we believe that these companies would likely take capital conservation measures in order to support their credit metrics during a period of stress.
- Japan's Narita and New Zealand's Auckland: both airports have a comparatively high exposure to international travelers compared to most other airports in the region. Saying that, in both cases we currently believe that there is a sufficient buffer in metrics to weather any potential impact on earnings. For example, we currently forecast Narita's ratio of FFO to debt to remain between 13% and 15% over the near term, compared to our current rating downside scenario of 10%. Further, both being the key airport for their country's largest city, they would likely retain a greater level of international traffic linked to essential travel compared to airports servicing smaller cities.
- Hong Kong: although 100% of the traffic at Hong Kong airport is considered international, we would view routes to and from China as likely to behave similarly to domestic routes in other countries. Further, Hong Kong airport has a high level of freight traffic compared to other regional airports, and we would assume that freight traffic would not be affected. Finally and most importantly, we consider that, because of its ownership, Hong Kong airport would almost certainly receive extraordinary support from the Hong Kong government in the event of financial distress (hence we equate Hong Kong airport's rating to the rating on the government).
- Norway's Avinor and Russia's Khabarovsk: both are somewhat exposed to the Ebola-related shock, as their financial ratios are toward the low end of the range. Khabarovsk currently has a negative outlook, given its large capital expenditure program and the weakening economic environment in Russia, which would make it more vulnerable than average airports to the impacts of Ebola; however, we see the risk of this as relatively low given that the airport has low exposure to international travel
- France's Aéroports de Paris group (AdP): under a basic passenger shock AdP looks vulnerable; however, the group has the most diversity among its European peers through operating airports in Paris but also outside France. The company also has capacity to adjust capital expenditure to offset some of the pressure from lower revenues, leading us to believe that the rating impact on AdP would be low.
- Russia's Domodedovo: quite exposed to a reduction in international traffic, as about half of its volume is international. However, while the impact on financial ratios could be material, the company currently has significant headroom in its financial risk profile, and therefore despite the impact on ratios, in our view potential rating impact is low.

**Table 3**

S&P Rated Airports In Asia-Pacific & Europe		
Adelaide Airport Ltd.	Australia	BBB/Stable
Aeroporti di Roma SpA	Italy	BBB+/Stable/A-2
Aéroports de Paris	France	A+/Stable
Airport Authority Hong Kong	Hong Kong	AAA/Stable
Auckland International Airport Ltd.	New Zealand	A-/Stable/A-2
Australia Pacific Airports Corp. Ltd.	Australia	A-/Stable
Avinor AS	Norway	AA-/Stable/A-1+

**Table 3**

<b>S&amp;P Rated Airports In Asia-Pacific &amp; Europe (cont.)</b>		
Brisbane Airport Corp. Pty Ltd.	Australia	BBB/Stable
Christchurch International Airport Ltd.	New Zealand	BBB+/Stable/A-2
DME Ltd.	Russia	BB+/Stable/B
Dublin Airport Authority plc	Ireland	BBB/Positive/A-2
Flughafen Zurich AG	Switzerland	A/Stable
Gatwick Funding Ltd.	U.K.	Class A: BBB+*
Heathrow Funding Ltd.	U.K.	Class A: A-/Stable* Class B: BBB/Stable*
N.V. Luchthaven Schiphol	Netherlands	A+/Stable/A-1
Narita International Airport Corp.	Japan	AA-/Negative/A-1+
OA O Khabarovsk Airport	Russia	B+/Negative
Perth Airport Pty Ltd.	Australia	BBB/Stable
Southern Cross Airports Corp. Holdings Ltd.	Australia	BBB/Stable
Wellington International Airport Ltd.	New Zealand	BBB+/Stable/A-2

\*Corporate securitization issue ratings.

In short: the higher the exposure to international traffic, the higher the potential ratings impact. Saying that, revenue diversity then provides a degree of mitigation. This is this combination that ultimately is at the heart of the expected overall limited impact on the overall sector.

A widespread reluctance to fly was one immediate development of 9/11, and the impact was felt on passenger volumes worldwide. SARS in 2002-2003, which primarily affected southern China, was felt by airports in and all around the Asia-Pacific region, and to smaller extent in Europe. But these histories have shown that air travel is a resilient sector. That is because the human need to connect with each other, do business with each other, and spend time in each other's lands means that event-driven reluctance to travel typically is short-lived. So although a security situation might see temporary dips in passenger number, the dip seldom is a permanent drop.

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