

## Credit Suisse Asset Management (Switzerland) Ltd. Equity Business

### Thematic Insights: Infrastructure



#### Airports: Central Hubs for Steadily Growing Air Traffic

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*"When I see the crumbling roads and bridges, or the dilapidated airports,...I know these problems can all be fixed,...but only by me."*

Donald Trump, 45<sup>th</sup> President of the United States<sup>1</sup>

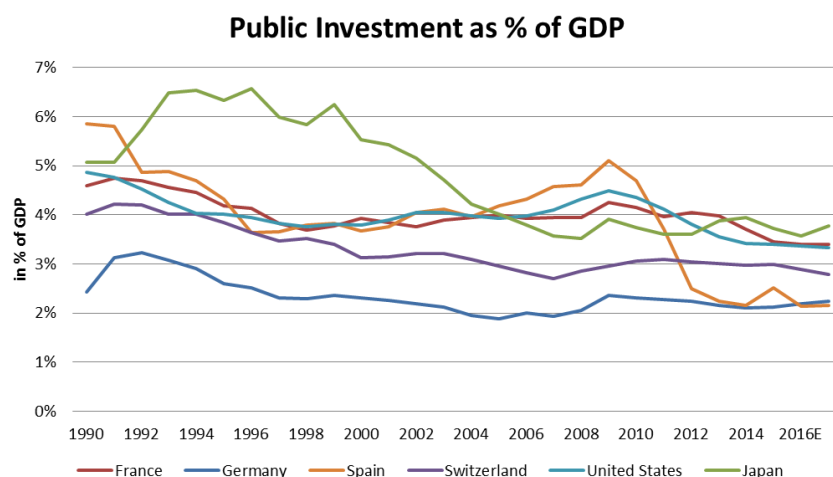
Election promises on fiscal policy in the US and Europe have given fresh impetus to infrastructure investments, especially since infrastructure maintenance and expansion have for years been restricted by limited financial resources. This gap should be reduced over the next few years, not least because spending on infrastructure has a significant economic multiplier effect and provides jobs and employment. In this context, the growth outlook for airports can be seen in a particularly favorable light, which we will examine in more detail in this issue.

#### Growth Spurt Thanks to Expansive Fiscal Policy

During recent decades, the financing of much-needed infrastructure investments has been restrained owing to high levels of public debt, with the result that the quality of existing infrastructure has suffered. Owing to the significant economic multiplier effect of investments in infrastructure and their positive impact on employment, both governments and politicians have expressed their support for extensive modernization and expansion of existing infrastructure in the run-up to elections, given that monetary easing by central banks has not yet achieved the desired results. As European Commission data<sup>2</sup> shows, direct state investment in infrastructure in industrialized countries has tended to fall over the past three decades (see Figure 1). It is no surprise that Donald Trump has announced that a one trillion USD infrastructure program will be presented in the US Congress, to include the modernization of roads, airports, residential properties, telecommunications, and the rail network. Germany too is planning to invest a total of EUR 250 billion by 2030 in the construction and modernization of roads, bridges, the rail network, and waterways. Japan is aiming to invest USD 60 billion in transportation and tourism by 2020. Even Canada has embarked on a program amounting to USD 125 billion that will pay equal attention to public transportation, and to environmentally-friendly and social infrastructure. In Europe, the move away from fossil fuels to renewable energy sources will trigger massive investments in electricity production and the transmission network worth EUR 700 billion over the next ten years. For this to succeed, governments and regulators will need to show support for a friendly investment climate and permit attractive returns on capital.

<sup>1</sup> Extract from a speech by Donald Trump on June 22, 2016 at the Soho Grand Hotel in New York

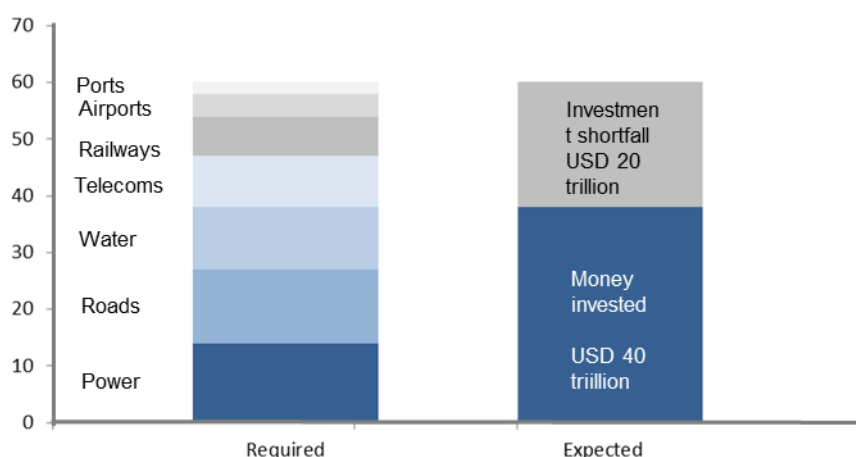
<sup>2</sup> European Commission, AMECO database, February 2017

**Figure 1: Share of public investments relative to GDP**

Source: European Commission , AMECO database, February 2017

In its latest report "Bridging Global Infrastructure Gaps," dated June 2016, McKinsey<sup>3</sup> points out that, purely to maintain the status quo, annual global expenditure on infrastructure will have to be increased by approximately USD 800 billion to USD 3.3 trillion up to 2030. McKinsey identifies the US, Germany, and the UK as the Western countries with most ground to make up, but also Mexico and Brazil. Forecasters estimate that the total need for infrastructure projects for the G20 countries amounts to USD 60 trillion. This results in an infrastructure gap of USD 20 trillion over the next 15 years.

Looking just at airports, McKinsey estimates the necessary investment at USD 1.3 trillion up to 2030. Asia and developing countries generally are likely to benefit most from this. In addition, investments of USD 5.2 trillion are needed in aircraft<sup>4</sup>.

**Figure 2: Investment gap to 2030 in USD trillion**

Source: McKinsey Global Institute Analysis, Credit Suisse

### The Infrastructure Universe and the Position of the Airports

The infrastructure investment universe comprises companies that provide the long-term, capital-intensive systems and facilities used for supplying energy and water, and for communications and transportation, and are of critical importance for a country's economic growth. Depending on the index<sup>5</sup> selected, the weight of transportation infrastructure companies varies between 15% and 40%. This sub-area includes operators on land (toll roads, tunnels, rail networks), water (ports), air (airport services, flight services), and space (space stations)<sup>6</sup>. The proportion of airport operators in this investment universe is around 5%.

<sup>3</sup> Bridging Global Infrastructure Gaps, McKinsey Global Institute, June 2016

<sup>4</sup> Global Market Forecast, Airbus, Mapping Demand 2016/2035

<sup>5</sup> The weight of transportation infrastructure is 15% in the MSCI World Core Infrastructure Capped Index, 30% in both the NMX Composite Index and the FTSE Russell Global Core Infrastructure 50/50 Index, and 40% in the S&P Global Infrastructure Index.

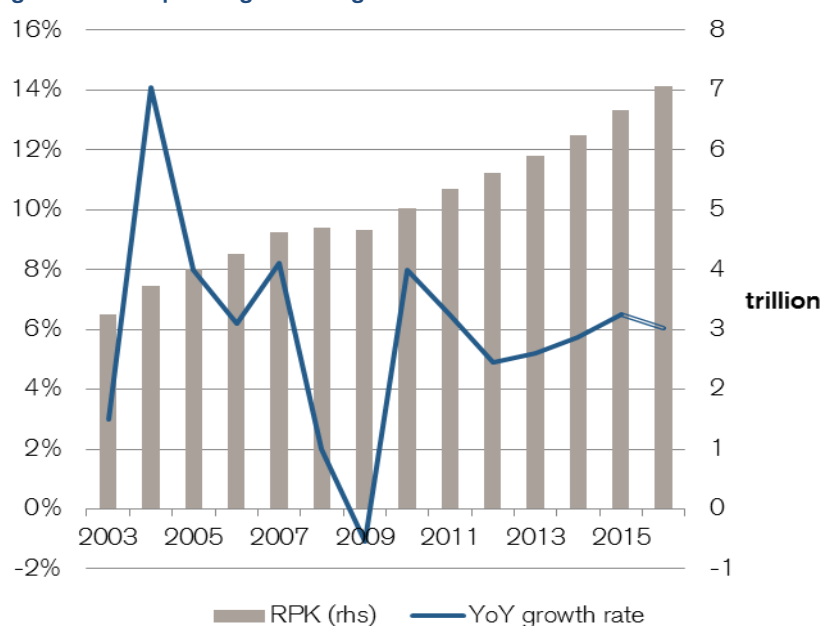
<sup>6</sup> Infrastructure as an Asset Class, Weber/Alfen, January 2011; page 9

## Growth of Aviation

Air travel is a growth market. According to the ICAO<sup>7</sup>, revenue passenger kilometers last November rose by 7.6% year-on-year, meaning that growth of 6% can once again be expected for the whole of 2016. For some time, the strongest growth has been posted in the Middle East, followed by Asia/Pacific. Recently, growth rates in Europe and Africa have accelerated again, while North and Latin America are currently posting the lowest growth. In November, the airports that recorded the strongest passenger growth during the previous 12 months were New Delhi with +19.1%, ahead of Guangzhou with +11.2%. Among European airports, Amsterdam stood out with +8.7% and Paris with +4.5%.

The outlook remains promising. Aircraft manufacturers expect to see air traffic doubling over the next 15 years, and anticipate annual growth of 4.5%<sup>8</sup> for the period 2016-2035. The forecasting model takes various variables into account such as economic growth, private consumption, urbanization, demographic trends, disposable income, immigration, tourism, kerosene prices, airfares, and bilateral agreements. While today only one in four people from a developing country takes a flight once a year, it will one day be three out of four people. According to current forecasts, China will have the highest volume of domestic traffic in 2035, thereby overtaking the USA. On the supply side, according to Airbus, this will require an expansion of the global fleet of passenger aircraft with over 100 seats from today's 18,020 to 32,425. Accordingly, the number of active pilots will more than double, from approximately 200,000 today to over 450,000 in 2035.

**Figure 3: World passenger traffic growth**



Source: Air Transport Monthly Monitor, ICAO, January 2017

## Which Listed Airports Will Benefit

Airports benefit firstly from stable cash flow from the airline business that is easy to estimate, and secondly they have a relatively stable income component from renting out commercial property. However, the main driver of growth is still passenger growth. In terms of regional capacity growth rates, the Middle East is currently best placed with double-digit growth, ahead of Asia/Pacific with high single-digit growth, and Europe with mid-single-digit growth. In China alone, the number of airports is likely to increase from 175 to 300<sup>9</sup> in 2030.

The three airports with the most passenger traffic are Atlanta, Beijing, and Tokyo, two of which are already run by companies listed on the stock exchange; and it is possible to build up a stake in almost half the 15 biggest airports via the stock exchange. Moreover, these companies make their management capacity available for setting up and operating various privately owned airports, or are also financially involved in the tendering process. These are mostly build-operate-transfer (BOT) contracts, in which ownership reverts to the seller once a defined concession period, usually 25 years, has expired. For example, the listed Turkish company TAV was awarded the contract on this basis for building and operating Medina airport in Saudi Arabia, while Fraport is responsible for operations in both Riyadh and Jeddah. Listed companies are therefore actively involved in various growth regions. Currently, the market capitalization of the over a dozen listed airport operators worldwide amounts to around USD 100 billion.

<sup>7</sup> Air Transport Monthly Monitor, January 2017, International Civil Aviation Organization (ICAO)

<sup>8</sup> Global Market Forecast, Airbus, Mapping Demand 2016/2035

<sup>9</sup> The "New Normal" for Airport Investment, PWC, November 2013

The valuation of flight operations is generally based on the investment capital recognized by a supervisory authority, and on the permitted maximum return measured as the weighted average cost of capital rate (WACC). This in turn is based on the average of a long-term borrowing rate plus a corresponding risk premium. In Europe, the WACC is currently between 5.25% and 5.5%. The regulatory authority supervises the takeoff and landing charges and the costs of ground handling, which are included de facto in airfares. The UK regulator (Civil Aviation Authority) only regulates charges at airports that occupy a significant market position. It turned down the setting of market-distorting charges at London City Airport, among other places, which has around 3% of London's airport capacity.

At the same time, income from non-aeronautical business (catering, retail, parking) is of great importance. This accounts for around half of total turnover, depending on the extent of airport expansion and attractiveness. In airport regulation based on the "dual-till" approach, which is used at the majority of airports, the different areas of an airport that are needed for the actual provision of aeronautical services are viewed in isolation. In this case, the income (or proceeds) from non-aeronautical commercial activities and the expenditure (or costs) incurred in the same area are ignored when regulating charges in the aeronautical area. In Europe, London Heathrow, Lyon, and Schiphol are exceptions to this.

The internal rates of return (IRR) based on future free cash flow and the current market prices of European airport stocks are currently between 4.5% and 8%. Rates below 5% already indicate high market valuations.

In addition to strong internal growth prospects, the sector also benefits from public-sector pressure to broaden the shareholder base in the run-up to modernization and expansion investments. Around 450 airports worldwide now have private-sector involvement either in management or in the shareholder base. Recent concessions related to the Japanese airport Osaka/Kansai, which went to a consortium with the French company Vinci. The same company was also successful in its bid for a 31% stake in Lyon airport, while 45% of the larger French airport in Nice went to the Italian group Atlantia. The last four airports have recently been privatized in Brazil, with European operators Fraport, Vinci, and Zurich Airport securing the concessions.

### What Else Needs to Be Considered

Nonetheless, even airport stocks cannot continue to soar ad infinitum, and certain risks should be borne in mind.

- Prices in the most recent tendering procedures have risen significantly, not least owing to rising demand from non-listed infrastructure funds. At present, around 20 times operating cash flow (EV/EBITDA) is being paid, which can only be justified if the high synergy potential is exploited.
- Rising interest rates are likely to have a negative impact on business results in the short term, as cost-of-capital rates in regulated aviation are only increased after a time delay. The periodic adjustment of charges by supervisory authorities can also lead to unwelcome surprises.
- In addition, passenger growth can also be subject to significant volatility. Terrorist attacks in particular can have a serious impact on vacation destinations.

### Conclusion

Airports are unique infrastructure investments. They benefit from a number of economic and industry-specific factors:

- At present, it is necessary to see worldwide how the relaxed monetary environment will be strengthened by fiscal expansion and incentives for private infrastructure investments.
- According to McKinsey, a huge infrastructure gap has already opened up in the G20 countries, with requirements clearly outstripping the planned projects.
- The upcoming new investments and investments in expansion estimated at USD 1.3 trillion by the year 2030 go beyond the capacity of the public sector to finance this alone. The trend towards privatization will continue.
- Aviation remains a growth market. Revenue passenger kilometers have risen by 6% annually in the past and are likely to increase by an average of 4.5% per year in the future. Airport operators can also increase their revenues through their non-aeronautical business.
- The companies operate in quasi-monopolies. The high capital investments can be written off over the duration of the concession, thus resulting in stable cash flows and attractive returns.
- In the regulated aviation sector, capital costs are generally adjusted to current market conditions at five-year intervals, such that rising interest charges can be neutralized through higher charges after a time delay.

For further information (such as current fund fact sheets, performance reports or quarterly commentaries) please click [here](#).

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