

Civil aviation and its changing world of work





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**Issues paper for discussion at the Global Dialogue Forum
on the Effects of the Global Economic Crisis on the Civil
Aviation Industry**
(Geneva, 20–22 February 2013)

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Acronyms

AA	American Airlines
ACI	Airports Council International
ANSP	air navigation service providers
ASA	air service agreement
ASK	available seat kilometres
ATM	air traffic management
ATSA	Aviation and Transportation Security Act
bmi	British Midland International
CANSO	Civil Air Navigation Services Organization
COFE	Civil Service Trade Unions (from Uruguay)
CUT	Single Confederation of Workers (from Colombia)
EASA	European Aviation Safety Agency
Eurocontrol	European Organisation for the Safety of Air Navigation
EWC	European Works Council
GDP	gross domestic product
GECAS	GE Capital Aviation Services
IAG	International Airlines Group
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IFATCA	International Federation of Air Traffic Controllers' Associations
ILFC	International Lease Finance Corporation
KLM	Royal Dutch Airlines
LATAM	Latin American LAN (Chile) and TAM (Brazil)
LCC	low-cost carriers
NACE	European standard classification of productive economic activities
RPK	revenue passenger kilometres
SARS	Severe Acute Respiratory Syndrome
SES	Single European Sky
TGWU	Transport and General Workers' Union
TSA	Transportation Security Administration
USCA	Trade Union of Air Traffic Controllers
WFS	Worldwide Flight Services

Terms ¹

Available seat kilometres (ASK)	The number of seats available for sale multiplied by the distance flown
Freight	Includes express and diplomatic bags but not passenger baggage.
Freight (or mail) tonnes carried	The number of tonnes of freight carried is obtained by counting each tonne of freight on a particular flight (with one flight number) once only and not repeatedly on each individual stage of that flight.
Low-cost carrier (LCC)	An air carrier that has a relatively low-cost structure in comparison with other comparable carriers and offers low fares and rates. Such an airline may be independent, the division or subsidiary of a major network airline or, in some instances, the ex-charter arm of an airline group.
Operating expenses per traffic-unit (unit cost)	This is a type of financial measurement which relates the traffic or capacity applicable to the operating expenses. It is computed by dividing the operating expenses by the tonne-kilometres performed or by the tonne-kilometres available
Operating margin	Operating profit/ (loss) as a percentage of revenue
Passengers carried	The number of passengers carried is obtained by counting each passenger on a particular flight once only and not repeatedly on each individual stage of that flight.
Passenger load factor	Passenger-kilometres performed expressed as a percentage of seat-kilometres available.
Revenue passenger kilometres	The number of revenue passengers carried multiplied by the distance flown.

¹ International Civil Aviation Organization, 2012a.

Introduction

This issues paper has been prepared by the Sectoral Activities Department (SECTOR) for the Global Dialogue Forum on the Effects of the Global Economic Crisis on the Civil Aviation Industry, to be held in Geneva on 20–22 February 2013.

At the 310th Session of the Governing Body (March 2011), it was proposed to hold a Global Dialogue Forum to “discuss the effects of the economic crisis in the civil aviation industry, in order to reach a common understanding of the difficulties the industry has undergone due to structural change, and a better understanding of the effects of the low-cost carrier model on the industry as a whole, as well as consensus on a common approach that could contribute to a more sustainable industry”.¹ At the 315th Session of the Governing Body (June 2012), it was decided to invite ten Employer and ten Worker representatives, after consultation with their respective groups in the Governing Body, to attend the Forum, as well as representatives of any interested Governments.²

The paper was prepared by David Seligson, SECTOR, and is published under the authority of the International Labour Office (ILO).

¹ GB.310/STM/1 and GB.310/14(Rev.).

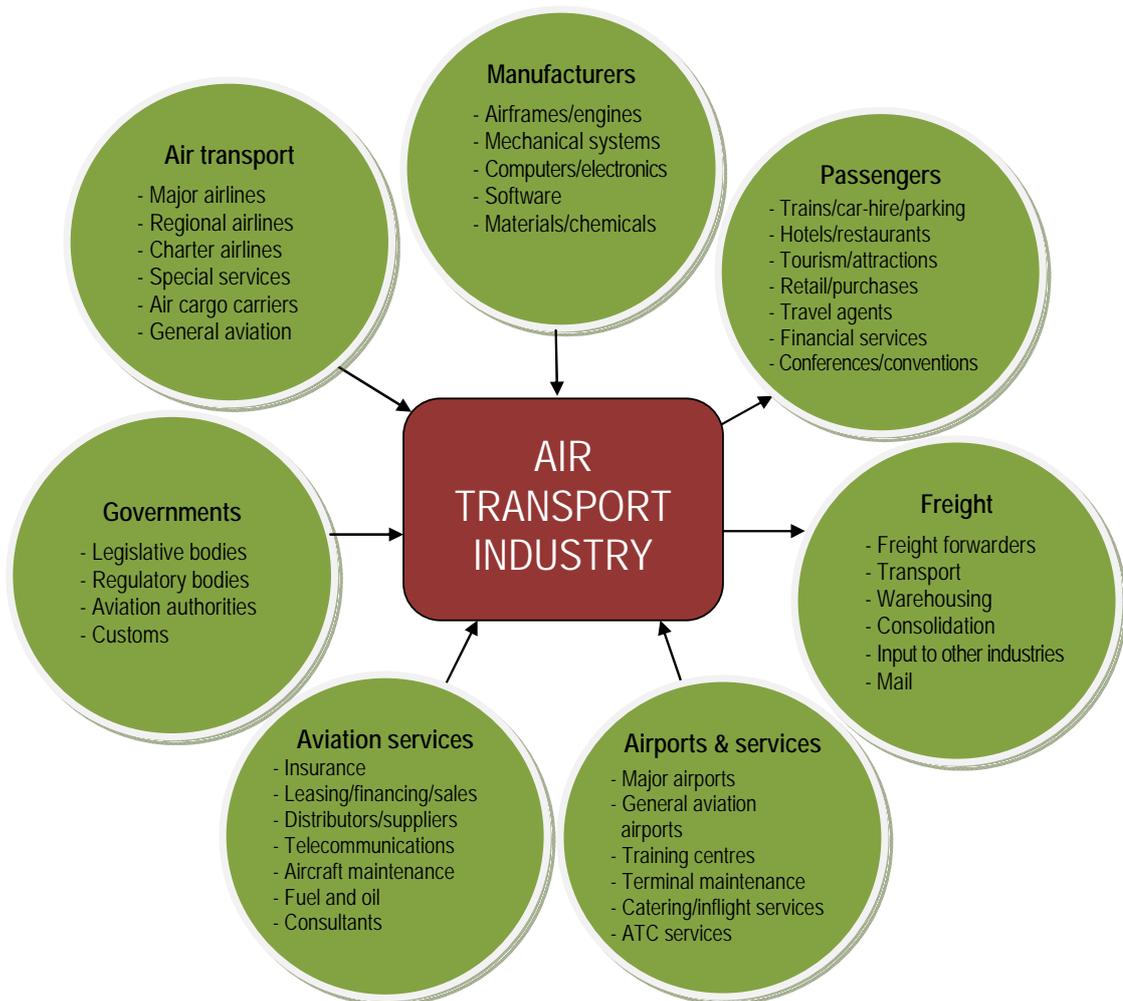
² GB.315/INS/8.

1. A short glance at civil aviation

Civil aviation has become a major industry in our time. Without air travel, mass international tourism would not exist, nor could global supply chains function. Some 40 per cent of high-tech sales depend on good quality air transport, and there is no alternative mode of transport for perishable commodities such as fresh food or cut flowers.

Air transport systems are interdependent, involving airlines, all service providers and authorities on the ground.³ This issues paper covers civil aviation in the air and on the ground;⁴ aircraft maintenance and manufacturing is not discussed in detail. Figure 1 shows the different actors in the air transport industry.

Figure 1. The air transport industry today



Source: ATAG: *The economic benefits of air transport*, op. cit.

1,715 airlines operate a fleet of 23,000 aircraft serving 3,750 airports through a route network of several million kilometres managed by 160 air navigation service providers.⁵

³ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

⁴ ISIC rev. 4 codes 51 (air transport) and 5223 (service activities incident to air transport).

⁵ Air Transport Action Group, 2012a.

In 2007, air transport generated US\$425 billion in value added and directly employed more than 5.6 million people worldwide. Direct jobs include those designing, building and maintaining aircrafts; pilots and cabin personnel in the air; air traffic controllers, customer service, baggage handlers, security officers and others on the ground. Indirectly, air transport supports employment along the supply chain, such as in materials providers for aircraft, accounting and insurance companies. Further on, those employed directly and indirectly purchase services and goods, and this creates induced employment. Counting indirect and induced employment, the industry supported 15.1 million jobs.⁶

Civil aviation has several distinct features. First, it is a truly transnational industry but still firmly anchored to countries. States often take pride in their national carriers. Secondly, it is highly regulated internationally and nationally: in part to maintain safety and security but also for economic and political reasons. Thirdly, deregulation of the industry since the late 1970s has led to differentiation among various categories of airlines. Fourthly, the job market in civil aviation is highly segmented, with wide differentiation of job profiles. These distinctions between occupational groups are also reflected in industrial relations throughout the industry.⁷

Demand for aviation is characterized by constant fluctuation, procyclicality, seasonality, directional flow and perishability. Factors affecting air traffic include gross domestic product (GDP), population growth, political stability, amount of leisure time and market access.⁸

Business travel is especially sensitive to fluctuations, and this has a huge impact on airline revenues. Airlines' inventory is comprised only of the seats that it has on each flight, so this perishability of its services makes the industry very vulnerable to external crisis.⁹ Airlines are dependent on cash-flow, and even in good years they are generally only marginally profitable.¹⁰

Historically, air travel growth has been double that of GDP growth.¹¹ In 2011, passenger kilometres globally increased by 6.5 per cent compared to world GDP growth of 3.7 per cent.¹²

2. From crisis to crisis

The civil aviation industry has been ridden with crises since 2000, some of them man-made, others caused by nature.

⁶ *Oxford Economics*, 2009.

⁷ European Foundation for the Improvement of Living and Working Conditions, 2010.

⁸ Vasigh, B., Fleming, K. and Tacker, T., 2008.

⁹ Harvey, G. and Turnbull, P., 2001.

¹⁰ International Labour Office (ILO), 2002a.

¹¹ *Massachusetts Institute of Technology Global Airline Industry Programme*, 2012.

¹² International Civil Aviation Organization, 2012b.

2.1. 11 September 2001

The terrorist attacks of 9/11 had a devastating effect on air travel. US airspace was closed for a week and international travel was severely affected.

Available seat kilometres for winter 2001–02 were down by 15 per cent on transatlantic and trans-Pacific routes, with American carriers reducing more capacity than their European counterparts.¹³

US airlines were faced with two major uncertainties: what was the airlines' liability for these kinds of attacks and would insurers be willing to underwrite future policies for the airlines? To address these concerns a law was passed in 2001 to limit airlines' legal liabilities and to provide them with direct assistance.¹⁴

European airlines announced 30,000 job cuts (10 per cent of their workforce), and North American airlines 95,000 job cuts (20 per cent of their workforce). Job cuts also extended to ground services (LSG 5,000 lay-offs, Gate Gourmet 3,000) and aircraft manufacturers (Boeing 18,000 lay-offs, Airbus 2,000). At the airports, food and beverage outlets and car rentals also suffered.¹⁵

Aircraft orders were cancelled: from 1,803 net orders in 2000, only 816 planes were ordered in 2001. The two major aircraft leasing companies, GECAS and ILFC, were forced to cut their lease rates and the crisis also decreased the value of aircrafts.¹⁶

However, air transport already had major problems in the months preceding 9/11 and traffic in January–September 2001 was unchanged from the same period in 2000. Fuel prices had increased markedly and customer satisfaction had declined.¹⁷ It has also been argued that 9/11 was utilized by companies to push already existing restructuring plans.¹⁸

Social dialogue was used to mitigate the consequences for workers. The measures included pay cuts, reduced working time and work-sharing.¹⁹

2.2. SARS 2002–03

It is claimed that the Severe Acute Respiratory Syndrome (SARS) epidemic (November 2002–July 2003) caused more damage to air transport than 9/11 and the Iraq war put together. Traffic in April 2003 was down 18.5 per cent year on year. Especially

¹³ International Labour Office (ILO), 2002b.

¹⁴ Goodman, C.J., 2008.

¹⁵ International Labour Office (ILO), 2002a; Morrell, P.S. and Alamdari, F., 2002.

¹⁶ Morrell, P.S. and Alamdari, F., 2002.

¹⁷ Belobaba, P.P. and Odoni, A., 2009.

¹⁸ Harvey, G. and Turnbull, P., 2001; Essenberg, B., 2003a.

¹⁹ International Labour Office (ILO), 2001a.

hard hit were airlines in Asia and airports in Hong Kong (China), Singapore and Seoul, where traffic decreased 40–60 per cent.²⁰

2.3. Economic crisis 2008–09

As a procyclical industry, civil aviation suffered major losses during the economic crisis of 2008–09. In 2008 operating losses for the 150 biggest airlines were US\$15 billion and in the United States 13 airlines went bankrupt. All US airlines, except Southwest, reduced their capacity. In Europe, Scandinavian Airlines (SAS) was the one reducing most capacity, by 40 per cent.

The economic crisis resulted in varied outcomes for airline personnel. For example, Lufthansa reduced working hours in its freight operations, British Airways resorted to pay freezes and Finnair to temporary lay-offs. Voluntary redundancies and non-renewal of temporary contracts were reported by surveyed unions. International Federation of Air Traffic Controllers' Associations (IFATCA) expressed its concern about reports of reductions in training.²¹

2.4. Volcanic ash problems in 2010

The eruption of Eyfjallajökull, a volcano in Iceland, in April 2010, caused the largest breakdown in civil aviation since Second World War. During the first week 100,000 flights were cancelled and the costs for the global economy during that week were calculated as US\$4.7 billion. The disruption affected some 10 million passengers.²²

In response to the eruption, a volcano watch system was created by the International Civil Aviation Organization (ICAO) and a task force delivered practical tools in June 2012.²³

3. Recent trends and outlooks in civil aviation

3.1. Growth of air transport

Since 1970 the number of flights has tripled and the number of passengers grown five-fold, as can be seen in figures 2 and 3.

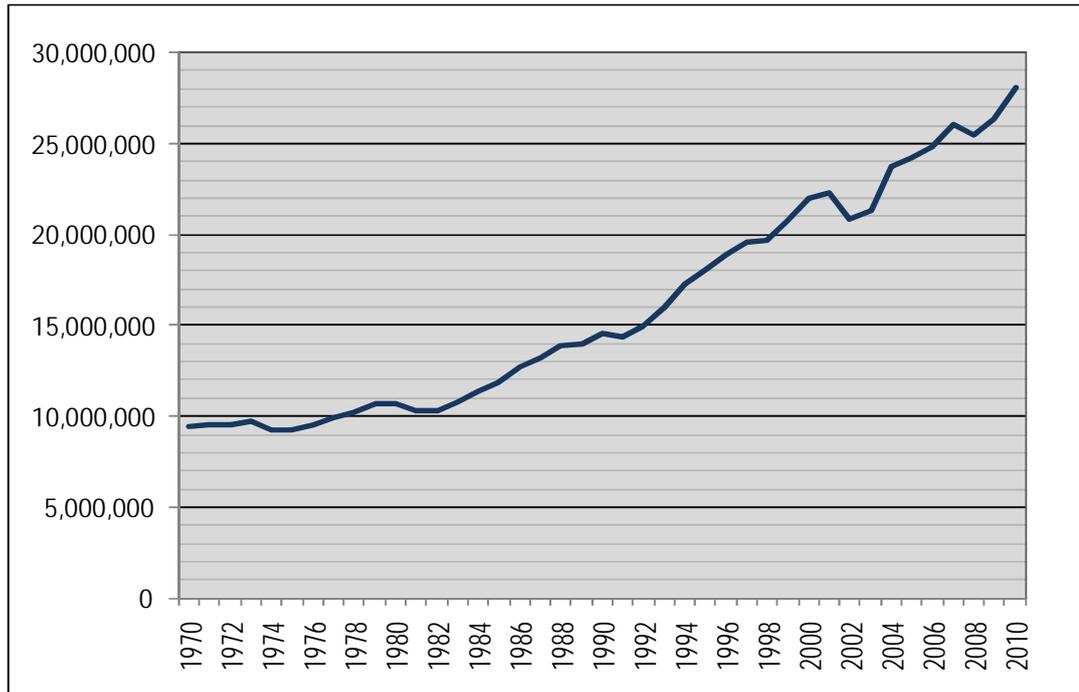
²⁰ Essenberg, B., 2003a.

²¹ Harvey, G. and Turnbull, P., 2009.

²² Air Transport Action Group, 2012b.

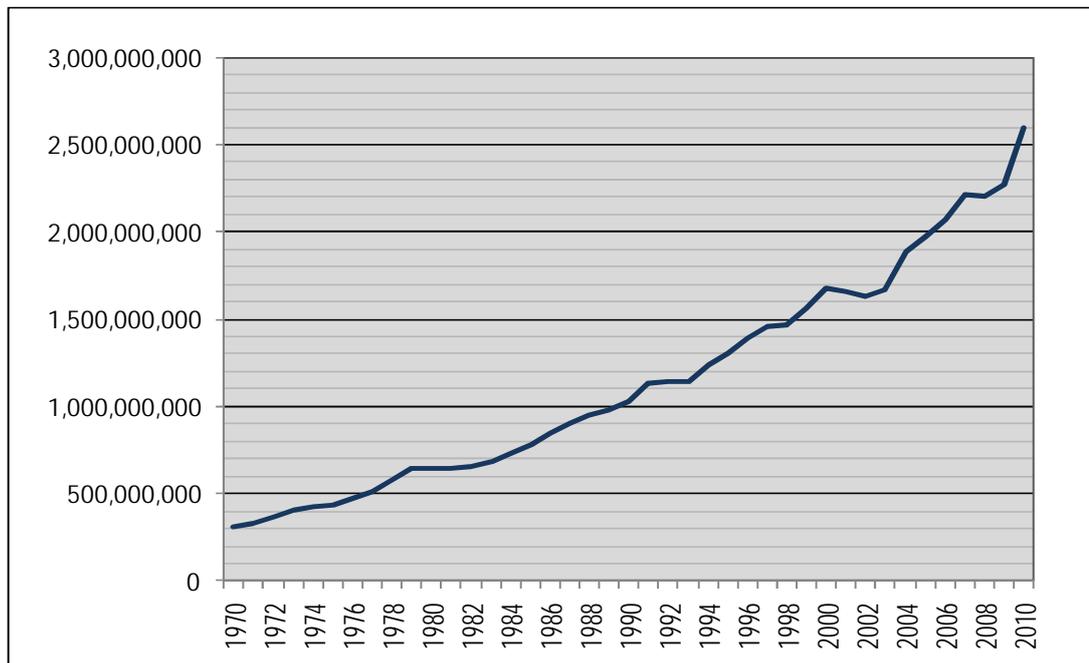
²³ International Civil Aviation Organization, 2012b; *Air Transport News*, 2012a.

Figure 2. Air transport, registered carrier departures worldwide 1970–2010 ²⁴



Source: The World Bank, 2012b.

Figure 3. Air transport, passengers carried, 1970–2010 ²⁵



Source: The World Bank, 2012a.

²⁴ Registered carrier departures worldwide are domestic takeoffs and takeoffs abroad of air carriers registered in the country.

²⁵ Air passengers carried include both domestic and international aircraft passengers of air carriers registered in the country.

Three sources (ICAO, Boeing and Airbus) predict the annual growth in international air traffic for 2008–27 to be 4.5–4.8 per cent for Europe–North America routes, 5.7–5.9 per cent for Asia Pacific–Europe routes and 5.6–6 per cent for Asia Pacific–North America routes.²⁶

3.2. Airlines

Airlines are wonderful generators of profit – for everyone except themselves.²⁷

Airlines have created value for their customers but not that much for their owners: the profit margin after 1970 has been only 0.1 per cent. Three in four airlines are privately owned but investors have more profitable alternatives.²⁸

Airlines tend to put blame for poor results on external factors, such as high fuel prices, terrorist attacks or airport charges. However, the industry is in chronic disequilibrium with permanent overcapacity. Overcapacity is caused by many factors, including government policies and ease of acquiring new aircrafts (often with export credit guarantees by governments). This is reinforced by the obsession of airlines for higher market shares, often leading to falling yields. Passenger load factors have markedly risen during recent years, but at the expense of collapsing fares.²⁹

Airlines can be divided in four broad types:

- (1) Full-service airlines transport 66 per cent of all passengers. Cargo is important for them, generating 10 per cent of revenue.
- (2) Low-cost carriers (LCCs) have taken passengers from full-service airlines but also created new demand, and carry 22 per cent of all passengers. They are strongest in Europe, where they have 41 per cent of the market. In Asia, many legacy airlines have established their own LCCs.
- (3) Regional airlines (9 per cent of passengers) operate short-haul, low-density routes and feed traffic into hubs.
- (4) Charter airlines (2 per cent of passengers) fly tourists with very high load factors but are under pressure from the LCCs.³⁰

3.3. World's largest airlines in 2011

Full-service airlines are usually bigger than others, as can be seen in figure 4. Southwest Airlines in North America and Ryanair with easyJet in Europe are the largest LCCs. The figure also illustrates how the LCCs have higher numbers of passengers

²⁶ Gillen, D., 2009.

²⁷ *The Economist*, 2012a.

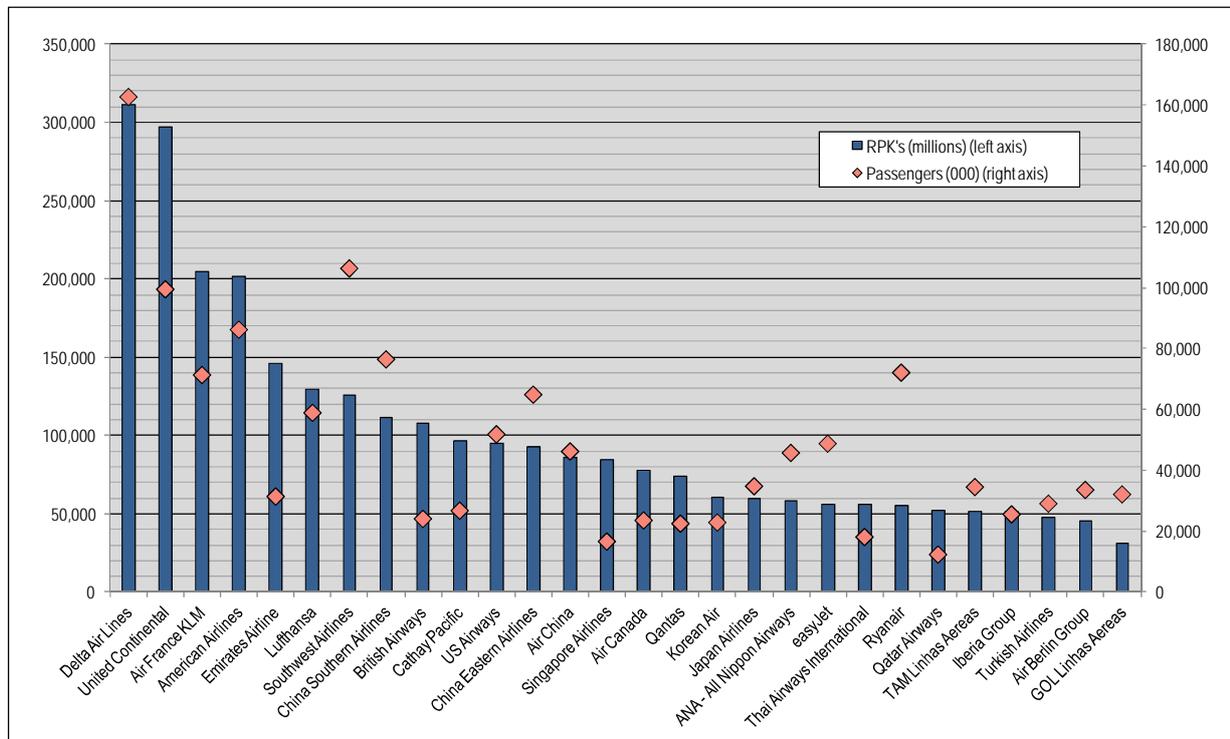
²⁸ Pearce, B., 2011; International Air Transport Association, 2011.

²⁹ Doganis, R., 2011.

³⁰ O'Connell, J.F., 2011a.

relative to their revenue passenger kilometres (RPK), as their flights on average are much shorter than those of the full-service airlines.

Figure 4. World's largest airlines in 2011, measured by number of revenue passenger kilometres (RPK) and number of passengers ³¹



Source: Air Transport World 2011; Air Transport World 2010; Air Transport World 2009.

3.4. Low-cost carriers

LCCs are usually characterized by lower ticket distribution costs, common fleet type, increased aircraft utilization, use of secondary airports, point-to-point route structure with non-stop flights and no-frills service. Legacy carriers have reacted to LCCs in different ways: some of them have created their own LCCs, but they have not succeeded; legacy carriers have also imitated LCCs by cutting their costs (reducing food service, charging for luggage and entertainment and reconfiguring plane layouts) and boosting productivity.³²

LCCs share of globally available seat capacity is around 25 per cent and 15 per cent of available seat kilometres (ASK).³³ Some LCCs are venturing into long-haul flights and increasing code-shares.³⁴

³¹ Qatar, Qantas, easyJet fiscal; China Eastern includes Shanghai Air; JALWAYS was integrated into JAL 1.12.2010; Lufthansa includes LH regional and LH Italia; Ryanair RPK year 2008; Iberia passengers year 2009; Delta: mainline and regional operations; Emirates, ANA, JAL, Singapore, AF-KLM, Ryanair: fiscal year ended 31.3.2011.

³² Vasigh, B., Fleming, K. and Tacker, T., 2008.

³³ International Air Transport Association, 2011.

The first low-cost carrier, Southwest Airlines, was established already in 1971 but the era of LCCs started in earnest after the deregulation in the United States (after 1978) and in the European Union (EU) (in the 1990s). LCCs manage higher utilization rates by shorter ground times. For example, in 2004 JetBlue had 46 per cent higher utilization rate for its fleet of Airbus 320s than Northwest Airlines for the same aircraft. LCCs also tend to have higher productivity, partly due to more flexible working rules allowing cross-utilization of employees. In 2004 Southwest recorded 3.2 million available seat miles per employee, compared to American Airlines (2.2 million). However, LCCs are not necessarily non-unionized nor do they always pay lower salaries than the legacy airlines.³⁵

Box 1
Southwest Airlines

Southwest has been profitable in all but its first year. There have been efforts to copy its success, which is often attributed to three reasons: only short-haul flights, point-to-point operations, no traditional unions. However, the keys for its success are leadership, culture and teamwork. Southwest manages relations between different employee groups better than others, and this relational coordination is its strongest weapon. Southwest has had a fairly conservative growth strategy and its financial reserves have enabled it to avoid lay-offs. Union density at Southwest is 88 per cent, making it the most unionized airline. It stands out from other US airlines by having had the fewest mediations, arbitrations and strikes. It has consistently succeeded in having nearly the lowest total unit costs in the United States, despite having nearly the highest labour costs.

Source: Gittell, J.H., 2008.

Box 2
Ryanair

Ryanair was founded in 1985 and became profitable in 1991. It is Europe's most profitable airline and carried 66 million passengers in 2009/10. In 2008 Ryanair carried 9,679 passengers per employee; EasyJet carried 6,152, Lufthansa 1,172 and KLM–Air France 690. Ryanair pits airports against each other in its efforts to cut down airport charges that it deems excessive. Ryanair is adamantly opposed to trade unions.

Barrett, S.D., 2011.

There have been several cases where courts have been called to decide under which national labour law jurisdiction the employees of an airline fall. For example, in the case of Ryanair workers in Charleroi, Belgium, a court decided that Belgian law took precedence over Irish law, as the employees were based in Belgium.³⁶ In 2012 Ryanair faced charges in France concerning illegal labour practices and registering workers employed in France as Irish employees.³⁷

More recent LCCs, such as easyJet and Virgin Blue, have attempted to follow the Southwest model.³⁸

³⁴ O'Connell, J.F., 2011a.

³⁵ *Massachusetts Institute of Technology Global Airline Industry Programme*. 2012.

³⁶ Broughton, A., 2005.

³⁷ *Travel Weekly*, 2012.

³⁸ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

LCCs have gained a high market share in some emerging economies, such as Brazil (50 per cent) and India (70 per cent).³⁹

3.5. Airlines in the Middle East

Airlines based in the Middle East have rapidly grown. Emirates Airline of Dubai was established in 1985 and today it is one of the world's largest airlines. Emirates pays no tax and it has a successful hedging programme against fuel prices. Dubai airport allows traffic at any time of the day or night, which allows Emirates to use its planes the maximum 14 hours a day. Huge public investments in airports have been an important driver in attracting flights. Qatar Airways and Etihad Airways are two other fast-growing airlines from the region.⁴⁰ Employees of these three airlines are not unionized. Unions in Dubai have been allowed since 2006 but only for its citizens; 90 per cent of Emirates' pilots and flight attendants are expatriates.

The three big Middle Eastern airlines remained for long outside the three alliances (Star Alliance, Skyteam and oneworld). However, in September 2012 a global partnership between Emirates and Qantas was announced,⁴¹ followed by the announcement of Qatar Airways joining oneworld⁴² and Etihad Airways implementing a commercial partnership with the Air France–KLM Group and airberlin.⁴³

The growing hubs in the Middle East may well facilitate the African air transport market.⁴⁴

3.6. Airline revenues

During the period of 2003–11, airlines have generated total net profits in four years and deficits in five years, as can see from figure 5.

³⁹ Wintersberger, D., Harvey, G. and Turnbull, P. Forthcoming.

⁴⁰ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009; International Air Transport Association, 2011.

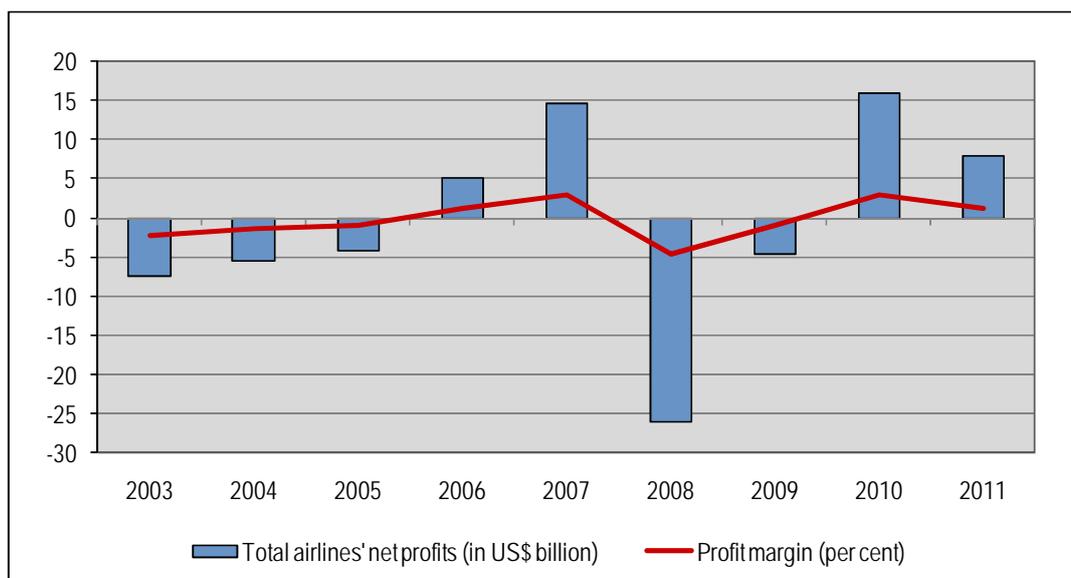
⁴¹ *Air Transport News*, 2012b.

⁴² *Air Transport News*, 2012c.

⁴³ *Air Transport News*, 2012d.

⁴⁴ Swelbar, W.S. and Belobaba, P.P., 2009.

Figure 5. Total airlines' net profits and profit margins 2003–11



Source: International Air Transport Association, 2012.

Airlines receive most of their revenues from ticket sources and freight. In recent years, ancillary revenues – those emanating from passengers after they have bought their tickets – have grown in a spectacular way. These revenues rose sharply from US\$2.3 billion in 2006 to US\$10.2 billion in 2008. The International Air Transport Association (IATA) estimates that ancillary revenues represented 12 per cent of airline turnover in 2010. In LCCs this can be considerably higher, for example 22 per cent for Ryanair. Traditional in-flight retail revenues have not markedly changed since the mid-1990s. Unbundling from tickets, meaning charging for elements that were previously considered part of the ticket price (baggage charges, seat charges, priority boarding) is increasing and creating revenues. Ryanair started to charge for luggage in 2005. As a result the proportion of passengers with checked luggage decreased from 80 per cent to 40 per cent by 2010. Ryanair explains that this helps not only to reduce costs but also mishandled baggage.⁴⁵

3.7. Airports

There are around 1,670 commercial airports in the world. As of early 2007, over 100 major airports had been privatized.⁴⁶ The largest airports are located in the United States, Europe and Asia, as can be seen in tables 1 and 2.

⁴⁵ O'Connell, J.F., 2011b.

⁴⁶ Vasigh, B., Fleming, K. and Tacker, T., 2008.

Table 1. Largest airports in 2011 by passenger numbers ⁴⁷

Rank	City (Airport)	Country	Total passengers
1	Atlanta (ATL)	United States	92 365 860
2	Beijing (PEK)	China	77 403 668
3	London (LHR)	United Kingdom	69 433 565
4	Chicago (ORD)	United States	66 561 023
5	Tokyo (HND)	Japan	62 263 025
6	Los Angeles (LAX)	United States	61 848 449
7	Paris (CDG)	France	60 970 551
8	Dallas/Fort Worth (DFW)	United States	57 806 152
9	Frankfurt (FRA)	Germany	56 436 255
10	Hong Kong (HKG)	Hong Kong (China)	53 314 213

Source: *The Guardian*, 2012.

Table 2. Largest airports in 2010 by plane movements ⁴⁸

Rank	City (Airport)	Country	Total movements
1	Atlanta (ATL)	United States	950 119
2	Chicago (ORD)	United States	882 617
3	Los Angeles (LAX)	United States	666 938
4	Dallas/Fort Worth (DFW)	United States	652 261
5	Denver (DEN)	United States	630 063
6	Houston (IAH)	United States	531 347
7	Charlotte (CLT)	United States	529 101
8	Beijing (PEK)	China	517 584
9	Las Vegas (LAS)	United States	505 591
10	Paris (CDG)	France	499 997

Source: Airports Council International, 2011a.

Many airports are specialized in handling cargo. Table 3 shows the largest cargo airports.

Table 3. Largest airports in 2010 by cargo ⁴⁹

Rank	City (Airport)	Country	Total cargo (tonnes)
1	Hong Kong (HKG)	Hong Kong (China)	4 165 852
2	Memphis (MEM)	United States	3 916 811
3	Shanghai (PVG)	China	3 228 081

⁴⁷ Total passengers: total passengers enplaned and deplaned, passengers in transit counted once.

⁴⁸ Total movements: landing + take off of an aircraft.

⁴⁹ Total cargo: loaded and unloaded freight and mail.

Rank	City (Airport)	Country	Total cargo (tonnes)
4	Incheon (ICN)	Republic of Korea	2 684 499
5	Anchorage (DEN)	United States	2 646 695
6	Paris (CDG)	France	2 399 067
7	Frankfurt (FRA)	Germany	2 275 000
8	Dubai (DXB)	United Arab Emirates	2 270 498
9	Tokyo (NRT)	Japan	2 167 853
10	Louisville (SDF)	United States	2 166 656

Source: Airports Council International, 2011b.

Airports are important sources of employment for their surrounding areas. London's Heathrow airport is the biggest single workplace in the UK. Of its 72,000 employees, half live in the five neighbouring boroughs and in these boroughs nearly 7 per cent of all those employed work at Heathrow.⁵⁰

Box 3
Charleroi Airport

Southern Belgium became a depressed region following the demise of coal and steel industry. As one part of a strategy to revive the region, Gosselies airport – renamed Charleroi Brussels South – was partially privatized in the 1990s and in 2001 Ryanair established a hub there. By 2008 the airport served 26 destinations and employed 4,000 people, approximately 3 per cent of the region's labour force. The airport also attracted some companies, such as Caterpillar and GlaxoSmithKline, to locate in the vicinity.

Source: *Oxford Economics*, 2009.

Airports earn their revenues from aeronautical or non-aeronautical sources. Aeronautical sources, such as landing fees and terminal charges, are usually regulated, whereas non-aeronautical revenues (retail, catering and other concessions, office rental, parking) are usually not, and they have become increasingly important.⁵¹ Security measures, accompanied by longer waiting times, have cut into airport revenues.

Ownership and control of airports varies immensely: on one end of the spectrum are airports that are owned, operated and regulated by the government while on the other end are fully private airports. The relations between airlines and airports also show differences: in some airports an airline guarantees the functioning of the airport, in others an airline owns or controls facilities, while in many airports the airlines are just using airport services.⁵²

The changes in airport ownership have at times put strain on their relations with the airlines. The industry organization of the airlines, IATA, claims that airports are natural monopolies and that they are not regulated effectively enough. The industry organization

⁵⁰ *Oxford Economics*, 2009.

⁵¹ Oum, T. and Fu, X., 2008.

⁵² *idem*.

for the airports, Airports Council International (ACI), is of the opinion that airports should not be regulated at all.⁵³

Box 4
Airports in Brazil

In February 2012 Brazil auctioned concessions to operate airports in Guarulhos, Campinas-Viracopos and Brasilia. In all three airports the state airports operator Infraero will retain 49 per cent stake and hold veto rights on strategic decisions. The auctions raised much more than anticipated, together 24.5 billion Brazilian reals (BRL). The winning companies must invest together over BRL16 billion to upgrade the airports before the 2014 World Cup and 2016 Olympic Games. The current employees of Infraero will have three options: remain with Infraero and be relocated to work at another airport; leave Infraero and be hired by the new airport operator; leave Infraero without going over to the new airport operator and receive compensation. Workers at Infraero were worried and took minor strike action.

Sources: CAPA Centre for Aviation, 2012; de Sante Croix, S., 2012; *The Economist*, 2012b.

Airports are differentiated, with some airports, for example London City, catering primarily for business travellers and others, leisure travellers. LCCs do not require lounges, but need quick turnarounds and therefore dislike bus transport between terminals and planes. Some airports have built special low-cost terminals. LCCs claim that they should be entitled to lower charges, as their passengers compensate that by using more food outlets at airports.⁵⁴

Prior to 9/11, airlines in the United States were responsible for aviation security, and for that purpose they contracted private companies. In November 2001, the Aviation and Transportation Security Act (ATSA) determined that airport security was the responsibility of the federal Government and established a new agency, the Transportation Security Administration (TSA). However, European countries did not return to government-controlled security models.⁵⁵

Aviation security is very costly: after 9/11 in the United States approximately US\$6 billion have been spent annually for security; the figure for Europe is estimated at US\$3 billion. However, indirect costs in the form of lost time for passengers are estimated to be much higher.⁵⁶

3.8. Ground handling and catering

Airlines have spun off much of their ground handling and catering tasks. These enterprises are constrained by airlines and airports, and are susceptible to the business cycles in air transport.⁵⁷ In the EU, ground handling has been gradually opened to markets by an EU directive from 1996.⁵⁸ It was estimated that in 2005, airlines still provided

⁵³ Niemeier, H-M., 2009.

⁵⁴ Graham, A., 2011.

⁵⁵ Raffel, R. and Ramsay, J., 2011.

⁵⁶ Barnett, A., 2009.

⁵⁷ Woon, C., 2011.

⁵⁸ Essenberg, B., 2001; Niemeier, H-M., 2010.

60 per cent of the ground handling services, independent handlers 24 per cent and airports 16 per cent.⁵⁹

Consolidation has taken place as well in ground handling and catering. LSG Sky Chefs, a subsidiary of Lufthansa, had a global share of 26 per cent of catering and employed close to 30,000 employees.⁶⁰ In June 2012 Worldwide Flight Services (WFS), a leader in cargo handling, and Aviapartner, a European leader in passenger handling, announced their merger. The new company will employ 17,000 and be the second largest world ground handler.⁶¹

Efficient baggage handling is very important for passengers; only flights being on time is considered more important for service quality. Airlines spend US\$3 billion yearly on reuniting baggage and compensation.⁶² An industry programme has recently delivered good results in reducing baggage mishandling rates, for example in Paris Charles de Gaulle by 40 per cent.⁶³

3.9. Maintenance, repair and overhaul

Three-quarters of maintenance in 2002 was still done by airlines themselves.⁶⁴ This is estimated to have decreased to 50–70 per cent by 2012.⁶⁵ In the United States, maintenance employment fell 33 per cent from 2000 to 2009. In the same period, the percentage of maintenance expenses outsourced increased from 24.3 to 38.9 per cent.⁶⁶

3.10. Air cargo

Air freight has grown at the same pace as world trade of manufacturing goods. For development from 1970 to 2010, see figure 6. Proximity to an airport has become an important factor in deciding the location of corporate headquarters or manufacturing plants.⁶⁷

⁵⁹ International Air Transport Association, 2011.

⁶⁰ *LSG Sky Chefs*, 2012.

⁶¹ *Aviapartner*, 2012.

⁶² O'Connell, J.F., 2011c.

⁶³ Gutlin, I., 2011.

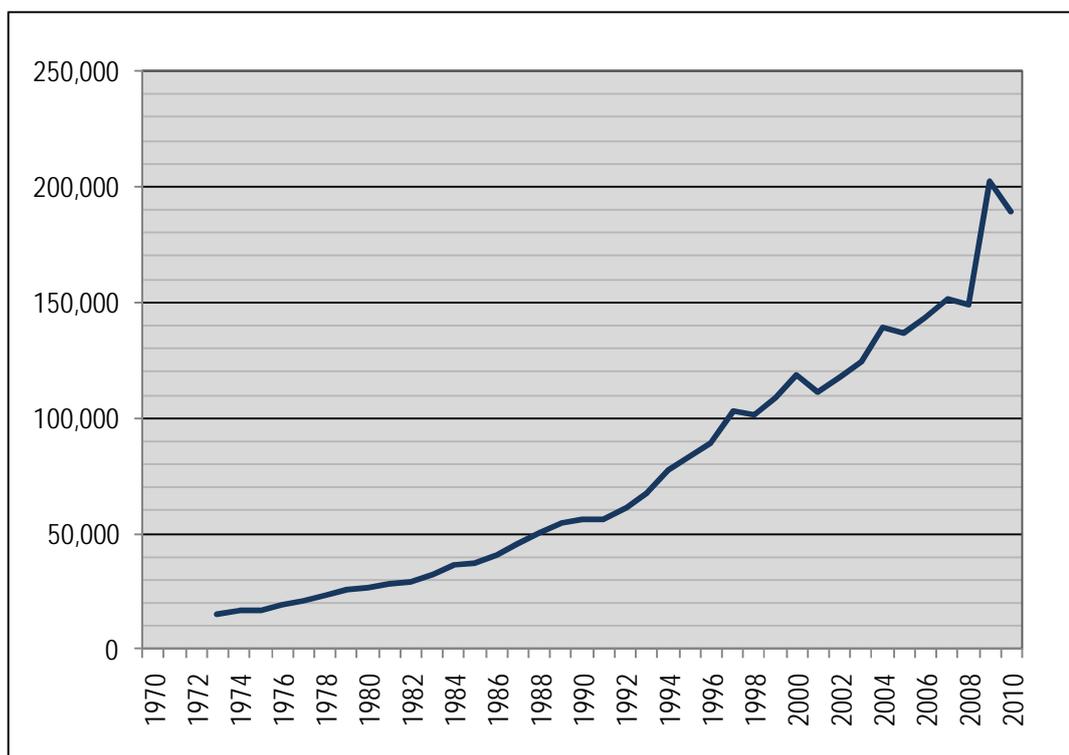
⁶⁴ Essenberg, B., 2001.

⁶⁵ International Air Transport Association, 2011.

⁶⁶ United States Department of Transportation, 2011.

⁶⁷ *Oxford Economics*, 2009.

Figure 6. Air transport, freight (million tonne-km), 1970–2010 ⁶⁸



Source: The World Bank, 2012c.

Criteria for using air cargo are that the goods are relatively light and compact and have high unit value. Only 0.5 per cent of world cargo is transported by air, but that represents 35 per cent of all cargo value. ⁶⁹

Cargo traffic differs fundamentally from passenger traffic because of directionality: for example, there is much more air cargo sent from China than goes in, while for Middle Eastern countries the situation is reversed. Almost half of all cargo is carried on passenger flights, while nearly 40 per cent goes by IATA all-cargo flights. Integrators (such as FedEx and UPS) and specialist carriers (such as Cargolux) together have a 15 per cent share of the cargo market. ⁷⁰

3.11. Air traffic management (ATM)

Air transport is dependent on a global infrastructure. Airspace worldwide is divided into 190 flight-information regions and these should work seamlessly together. Air traffic management represents 3–5 per cent of airlines' costs, but beyond that they have a huge

⁶⁸ Air freight is the volume of freight, express cargo and diplomatic bags carried on each flight stage (operation of an aircraft from takeoff to its next landing), measured in tonnes times kilometres travelled.

⁶⁹ Air Transport Action Group, 2012b.

⁷⁰ Morrell, P.S., 2011.

influence on fuel consumption – and fuel costs currently represent 30–35 per cent of all airlines’ costs.⁷¹

ATM systems were traditionally owned by governments. However, during the past two decades commercial models have been introduced, and today the ATM systems vary from state-owned to fully privatized and from profit to non-profit. There are 160 air navigation service providers (ANSP) in hundreds of locations and employing 200,000 people. According to IFATCA,⁷² over 70 per cent of ANSPs are still public. According to IATA, airlines paid €11.6 billion for ATM in 2010 and could easily save 10 per cent with less fragmented ATM systems.⁷³

The Single European Sky (SES) initiative in Europe was approved in 2004. It aimed to create additional capacity and increase efficiency of ATM in Europe.⁷⁴

4. Regulatory and market changes and their impact on employment and industrial relations

4.1. The civil aviation industry in the decade following 9/11

In the latter half of the 1990s air travel in North America increased steadily. The industry was profitable and created 97,000 jobs between January 1995 and January 2000. After 9/11, passenger volumes started to grow again from 2002 and increased 24 per cent to 2005. However, this growth in air travel in North America was not accompanied by an increase in employment, as can be seen in figure 7; on the contrary, employment in the industry declined by 80,000. This translated into a dramatic increase in productivity: between 2001 and 2005 productivity rose by nearly 50 per cent.⁷⁵

⁷¹ Smout, A., 2011.

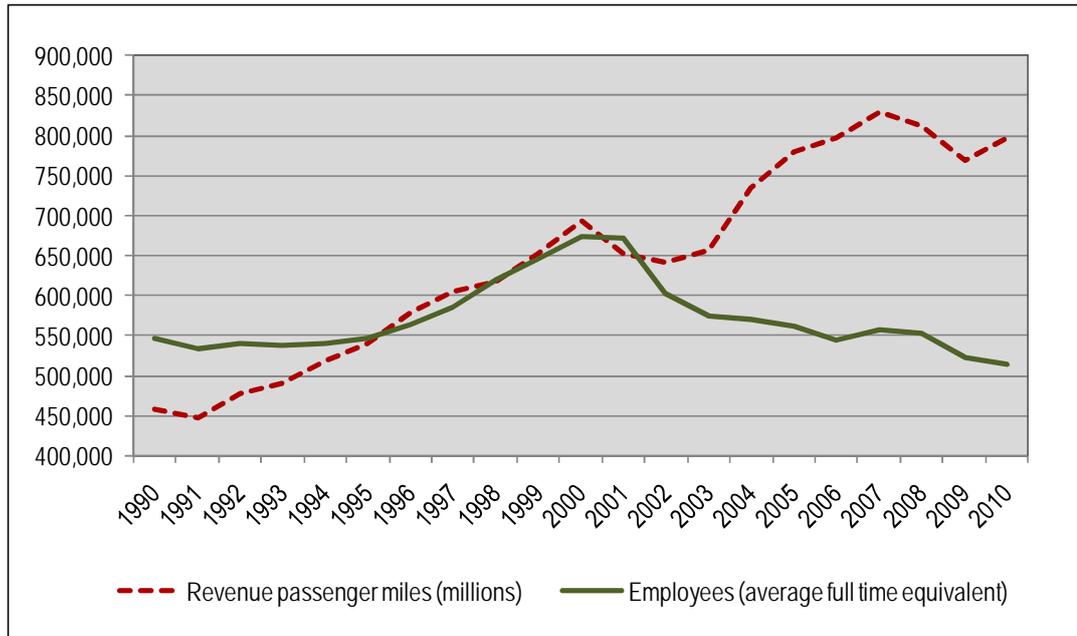
⁷² *International Federation of Air Traffic Controllers’ Associations (IFATCA)*, 2012.

⁷³ Singh, M., 2011.

⁷⁴ Odoni, A., 2009.

⁷⁵ Goodman, C.J., 2008.

Figure 7. The United States annual airline employment and revenue passenger miles, 1990–2010



Source: Airlines for America, 2011; Air Transport Association, 2000.

However, this was accompanied by a sharp decline in employee confidence in their management and overall morale.⁷⁶ Industrial relations deteriorated, especially in the United States. Aviation infrastructure caused congestion and delays, which, exacerbated by increased security measures, led to customer dissatisfaction.⁷⁷

The increase in passenger volumes in North America between 2002 and 2005 did not translate into profits for airlines. Ticket prices continued declining and at the same time fuel prices increased three-fold from 2001 to mid-2006. This meant that the break-even load factor rose from 65 per cent in the late 1990s to 85 per cent; even as the industry increased the load factor from 70 to 75 per cent it lost money.⁷⁸

Between 2001 and 2005, four of the six US legacy carriers (US Airways, United Airlines, Delta Air Lines and Northwest Airlines) went into Chapter 11 bankruptcy. Employment in legacy airlines during that period went down by 30 per cent and average wages decreased by 7 per cent.⁷⁹ Bankruptcy is a costly way to restructure: the US bankruptcies in the 2000s cost perhaps as much as US\$4 billion to the airlines.⁸⁰

In 2005, 41 per cent of seat capacity in the United States was provided by airlines that were in bankruptcy protection. That protection allowed those airlines to cut their staff by

⁷⁶ Bamber, G.J., Gittell, J.H., Kochan, T. A. and von Nordenflycht, A., 2009.

⁷⁷ *Massachusetts Institute of Technology Global Airline Industry Programme*, 2012.

⁷⁸ Goodman, C.J., 2008.

⁷⁹ *Massachusetts Institute of Technology Global Airline Industry Programme*, 2012.

⁸⁰ Bamber, G.J., Gittell, J.H., Kochan, T. A. and von Nordenflycht, A., 2009.

one third and salaries by 25 or 30 per cent.⁸¹ Between 2000 and 2006, labour unit costs for US legacy airlines dropped 18 per cent, whereas unit costs for LCCs increased by 8 per cent. LCCs cost advantage in labour costs was thus reduced from 38 per cent to 19 per cent. However, total unit costs of legacy airlines increased 29 per cent during the same period, whereas LCCs total unit costs only grew by 13 per cent. This trend of an increasing gap between legacy airlines and LCCs was also experienced in Europe and Asia.⁸²

US airlines reacted to 9/11 and the subsequent downturn by first cutting jobs and only thereafter negotiating with the unions. In Europe many companies undertook extensive consultations with the unions and these often resulted in alternatives to job cuts.⁸³

In American Airlines, for example, workers had agreed to wage cuts amounting to US\$1.8 billion, when it was revealed that the management had been granted bankruptcy-proof pensions and large bonuses. The ensuing conflict led to the resignation of Donald Carty, the CEO of American Airlines, in 2003.⁸⁴

Productivity growth in 2005–07, depreciation of the US dollar and synergies from alliances again pulled the airline industry into profitability. Rises in fuel prices and the economic crisis in 2007–09 hit the industry. However, already in 2009 the results of reducing capacity, restructuring and growing ancillary revenues started to show and by mid-2010 both passenger and freight markets were back above pre-recession levels.⁸⁵

4.2. Deregulation

The Convention on International Civil Aviation (Chicago Convention) of 1944 and its two supplementary agreements regulate the airline industry quite strictly. In 1978 the US Airline Deregulation Act was meant to decrease or remove government control over fares, market entry and routes for domestically owned airlines. This led to a decrease in real average fares, although the disparity between the lowest and highest fares increased.⁸⁶ Deregulation opened the market to new entrants and to price competition and it was followed by new products and services and by changes in employment relations.⁸⁷ In Europe a phased transfer to open skies policies in 1993–97 removed much government control of EU airlines and since 1997 EU airlines have had the right to operate a route within another EU country.⁸⁸

The United States and the EU concluded an open skies agreement in 2008, which replaced individual air service agreements (ASA) between the United States and individual

⁸¹ O'Connell, J.F., 2011a.

⁸² Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

⁸³ Essenberg, B., 2002.; Bamber, G.J.; Gittell, J.H.; Kochan, T.A. and von Nordenflycht, A., 2009.

⁸⁴ Essenberg, B., 2003a.

⁸⁵ O'Connell, J.F., 2011a.

⁸⁶ *Massachusetts Institute of Technology Global Airline Industry Programme*, 2012.

⁸⁷ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

⁸⁸ Broughton, A., 2005.

EU countries.⁸⁹ This agreement does not open US airlines to majority foreign ownership, nor does it give cabotage rights (right to transfer passengers on domestic US routes) to EU airlines.⁹⁰

The regulatory system over air transport is based on airlines having nationalities. Most countries still have limits on foreign ownership, typically restricting it to less than 50 per cent. However, as airlines have contracted out their functions, such as maintenance or IT, employment has increasingly become international.⁹¹ Lifting restrictions on ownership could bring air transport to the same situation as in the shipping industry: that ownership and nationality (flag State) are two different things. One argument for current regulations is that lifting restrictions on ownership could lead to flags of convenience for airlines.

Box 5
Debate on US regulation

The United States maintains strict control on the airlines allowed to operate domestic flights. At least 75 per cent of the voting rights in these airlines must be controlled by US citizens and at least two-thirds of the directors and managing officers must be US citizens. Issues under debate over permitting foreign ownership include domestic and international competition safety, national security and employment. On the one hand, pilots in the EU15 earn somewhat less than US pilots; on the other hand, increased foreign ownership accompanied by access to capital could strengthen the US airline industry and reduce the need for concessions. But liberalization could also allow investors to move pilots' and cabin staff's domicile to places with lower labour costs.

Source: Cosmas, W. et al., 2011.

4.3. Consolidations

Owing to international and national restrictions and the relative immaturity of the industry, mergers in air transport have not been as common as in many other industries. Alliances have been a means to consolidate without mergers. Three alliances, Star Alliance, Skyteam and oneworld, together have 58 members and a market share of 77 per cent.⁹²

The merger of Air France and KLM in 2004 was the first real cross-border merger. In the United States, Delta and Northwest merged in 2008; and United and Continental in 2010, creating the world's largest airline. In Europe, Lufthansa acquired smaller airlines: Swiss, Austrian and 45 per cent of Brussels Airlines. In Latin America LAN (Chile) and TAM (Brazil) merged in 2010–12 creating LATAM group, which has some 35 per cent of all passenger traffic in Latin America.⁹³ In 2011 British Airways, Iberia and bmi formed

⁸⁹ O'Connell, J.F., 2011a; Odoni, A., 2009.

⁹⁰ Rhoades, D.L., 2011.

⁹¹ Forsyth, P., 2011.

⁹² *Wikipedia*, 2012.

⁹³ O'Connell, J.F. 2011a.

International Airlines Group (IAG) as their parent company with the three airlines continuing as individual brands.⁹⁴

Airline mergers have been a cause of concern for workers. A study on mergers in civil aviation in the United States published in 1996 concluded that mergers had significant direct or indirect negative employment effects on pilots and flight attendants, whereas employment of mechanics did not change. Flight attendants' earnings also decreased, but there were no effects on pilots' earnings.⁹⁵

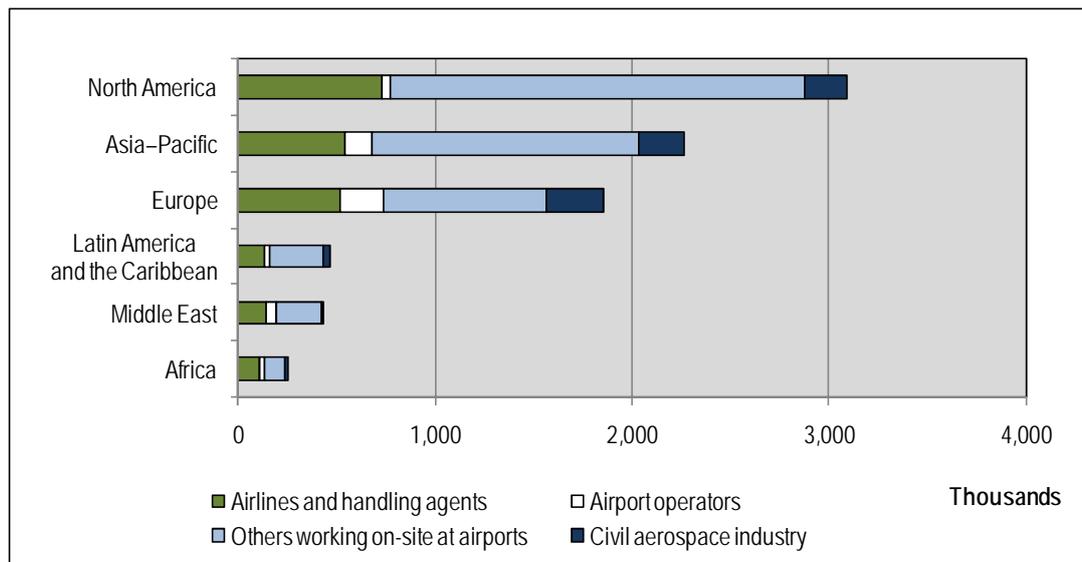
Consolidation can lead to airlines achieving a monopoly in selected routes. This is even more apparent in the case of airline alliances. However, the US Department of Transport can grant immunity from anti-trust to alliances, provided that the carriers are from open skies countries.⁹⁶

4.4. Employment

If the Wright brothers were alive today, Wilbur would have to fire Orville to reduce costs. (Herb Kelleher of Southwest Airlines, in *USA Today*, 8 June 1994.)⁹⁷

Air transport in total supported nearly 8.4 million⁹⁸ direct jobs in 2010. A breakdown of these jobs by region and by employee group is in figure 8.

Figure 8. Employment in air transport in 2010



Source: Air Transport Action Group, 2012.

⁹⁴ International Airlines Group, 2012.

⁹⁵ Essenberg, B., 2001.

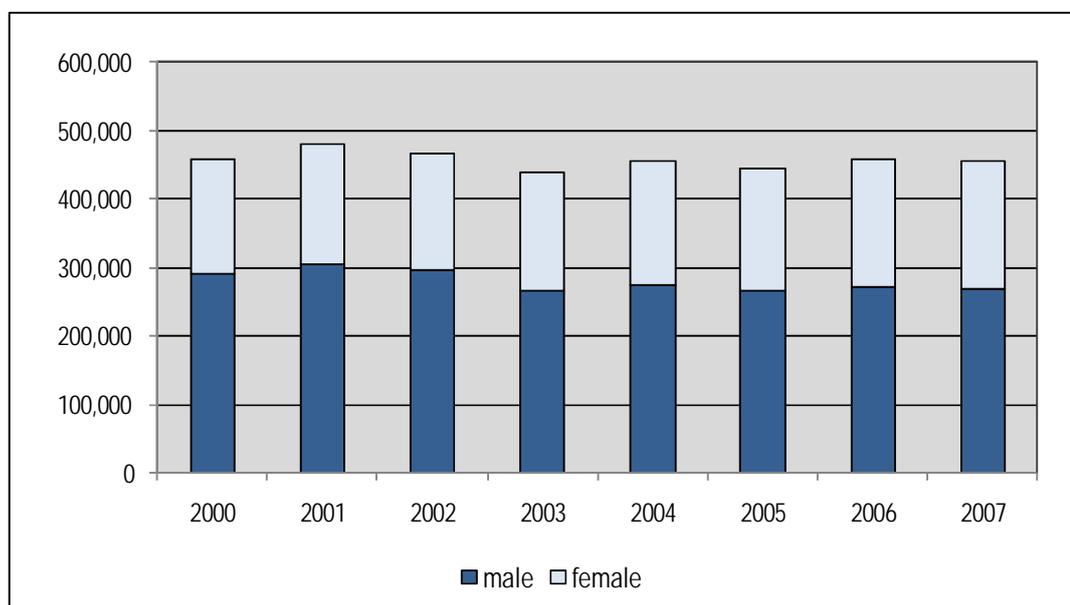
⁹⁶ Rhoades, D.L., 2011.

⁹⁷ Vasigh, B., Fleming, K. and Tacker, T., 2008, p. 79.

⁹⁸ This number includes also airport workers, who are classified as indirect employment on page 3.

Some employee groups, such as pilots, are heavily dominated by men, whereas others, including cabin staff, are dominated by women. In the EU, the proportion of women in air transport (NACE 62) increased slightly from 2000 to 2007, as can be seen in figure 9.

Figure 9. Employment in air transport in EU27, 2000–07



Source: Eurostat, 2012.

Labour was historically airlines' largest cost component, although in recent years fuel has become the single largest cost. However, airlines have only limited possibilities to influence fuel prices or aircraft costs, leaving labour costs as the category that management can control.⁹⁹

Recent falls in employment can be attributed to several factors: firstly, outsourcing; secondly, the growing share of LCCs, which fly newer planes and employ fewer workers; and thirdly, technology has substituted human labour in tasks such as ticketing and luggage handling.¹⁰⁰

Airlines may focus on cost reductions by minimizing wages and benefits and reducing staff. Another option is to focus on total costs and improving productivity – both workforce and aircraft – and using better other costly assets, such as airport gates. Ryanair is an example of the first approach and Southwest of the second.¹⁰¹

Economic downturn increased the use of two-tier working conditions. The use of subcontracting, especially in ground services and catering, also became more prevalent.¹⁰² Airlines have outplaced part of their staff by establishing crew bases outside their home country. Reasons for this can be both economic (to reduce labour costs) and functional, as

⁹⁹ Harvey, G. and Turnbull, P., 2001.

¹⁰⁰ United States Department of Transportation, 2011.

¹⁰¹ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

¹⁰² Broughton, A., 2005.

airlines for example need cabin staff mastering certain languages. Airlines have also outsourced their call centres and ticket operations.¹⁰³

Outsourcing of various parts of their business has been seen as a way for airlines to reduce their costs. However, it has also been claimed that outsourcing has affected the industry negatively in the long run, as airlines have lost control over their value chain while outsourcing has reduced differentiation between the airlines.¹⁰⁴

Outsourcing can have major consequences for collective bargaining. In the case of British Airways, outsourced workers fall outside British Airways collective bargaining, whereas in Lufthansa outsourced functions have remained under the same collective bargaining framework.¹⁰⁵

Private employment agencies are increasingly used by airlines and companies operating at airports. This can lead to a rise in temporary employment and cause confusion about the regulations and agreements that apply, even about which national jurisdiction applies.

Box 6

Changes in Austrian Airlines in 2012

Austrian Airlines has been a subsidiary of Lufthansa since 2009. In 2012 Austrian Airlines transferred its ownership to its subsidiary Tyrolean Airways. Two of the three collective agreements in Austrian Airlines were cancelled and flight crew were left with the Tyrolean agreement, paying about 25 per cent less. Ground staff were not involved.

Source: Allinger, B., 2012.

5. Towards a more sustainable civil aviation industry

5.1. Growth and risks

Aviation is forecasted to expand strongly in the next two decades. Passenger numbers are predicted to increase from 2.7 billion in 2010 to 5.9 billion in 2030. Aircraft movements are predicted to double, from 26 million to 48.7 million. Assuming that the traffic estimations come true, the number of direct jobs is set to increase from 8.36 million to 12.1 million.¹⁰⁶

However, air travel is faced with severe constraints of infrastructure. There has been some success in increasing airspace capacity by improving air navigation systems. Lack of runways remains a bottleneck, as it is increasingly difficult to build new airports or new

¹⁰³ Essenberg, B., 2001.

¹⁰⁴ International Air Transport Association, 2011.

¹⁰⁵ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

¹⁰⁶ Air Transport Action Group, 2012b.

runways at existing airports.¹⁰⁷ The last new major airport built in the United States was in Denver in 1995.¹⁰⁸

As air travel increases, the industry needs skilled workers. Concerns have been raised about lack of trained workers in the future.¹⁰⁹ ICAO has compared the training needs for 2010–30 with the existing training capacities and has identified bottlenecks and reminds that shortages of trained personnel can constrain air traffic growth.¹¹⁰

Aircrafts fly with fewer employees, more passengers and using less time at airports. The flip side of the coin is systemic risk, comparable to just-in-time manufacturing. Employees falling ill or refusing overtime, minor delays in aircraft turnover at the airport or passengers getting stranded because of lack of space on alternative routes are a few examples of such problems.¹¹¹

5.2. Economic and environmental sustainability

According to IATA, air transport supply chains deliver very little to the airlines, but some segments – including computer reservation systems, travel agents and freight forwarders – are able to get double-digit percentage returns on invested capital.¹¹²

Vision 2050, a report by IATA, argues that bad performance of airlines is bad for the whole air transport industry. Parallel to enabling the airlines to capture a fairer share of the value, other stakeholders should benefit as well: customers should get better service, there should be less congestion and environmental impact and workers would have more predictable wages and fewer lay-offs.¹¹³

Raymond Benjamin, Secretary General of the ICAO, agrees that profits are not equally spread along the value chain and that this cannot be sustainable in the long term. He calls for a “seamless air transport economy” with effective allocation of resources and environmental accountability.¹¹⁴

Air transport is responsible for fewer than 2 per cent of CO₂ emissions. The industry has set a target to improve fuel efficiency by 1.5 per cent per year until the year 2020. Improvements in air navigation can also reduce emissions: it is estimated that the planned Single European Sky would reduce emissions in Europe by 12 per cent.¹¹⁵ However, air

¹⁰⁷ *Massachusetts Institute of Technology Global Airline Industry Programme*, 2012.

¹⁰⁸ Rhoades, D.L., 2011.

¹⁰⁹ International Air Transport Association, 2011.

¹¹⁰ International Civil Aviation Organization, 2012c.

¹¹¹ International Air Transport Association, 2011.

¹¹² International Air Transport Association, 2011.

¹¹³ International Air Transport Association, 2011.

¹¹⁴ Benjamin, R., 2012.

¹¹⁵ *Oxford Economics*, 2009.

transport has a high rate of emissions per passenger kilometre and measures to reduce emissions may significantly add to air transport costs and slow its growth.

5.3. Challenges for Decent Work

5.3.1. Rights at work

Union density in civil aviation is usually higher than union density in the labour force in general. Union structures are complex, as there are separate unions representing different categories of workers. Industrial action is fairly common, although in some countries air transport is considered an essential service and this restricts the right to strike.¹¹⁶

The ILO Committee on Freedom of Association has in recent years examined a number of cases concerning civil aviation. For example, in 2010 the Trade Union of Air Traffic Controllers (USCA) from Spain accused the authorities of altering the freely concluded collective agreement.¹¹⁷ In 2008 the Confederation of Civil Service Trade Unions (COFE) from Uruguay filed a complaint concerning the decision to declare air traffic control to be an essential service.¹¹⁸ In 2007 the Single Confederation of Workers (CUT) from Colombia, representing the National Union of Civil Aviation Workers, alleged unjustified transfers of several members of the trade union and the opening of disciplinary proceedings against members.¹¹⁹

The International Trade Union Confederation (ITUC) has highlighted violations of trade union rights in countries such as Kuwait, Mongolia, Paraguay, Peru and Turkey.¹²⁰ In May 2012 Turkey established a new law banning strikes in the airline industry.¹²¹

5.3.2. Occupational safety and health

Cabin crew and pilots are susceptible to specific health hazards. One of them is exposure to radiation, which is very risky during pregnancy. Repeated jet lag is another health hazard. Cabin crew can be injured by baggage or carts or burned by galley equipment. Violence by distressed passengers (air rage) can harm cabin crew but also jeopardize the safety of the aircraft. Ground personnel often work in a chaotic environment and baggage handlers are at risk for musculoskeletal injuries caused by heavy loads. Ground personnel are frequently exposed to jet exhaust, chemicals and noise. Air traffic controllers' work requires utter concentration and they can suffer from stress.¹²²

¹¹⁶ Broughton, A., 2005.

¹¹⁷ *International Labour Organization*, 2012a.

¹¹⁸ *International Labour Organization*, 2012b.

¹¹⁹ *International Labour Organization*, 2012c.

¹²⁰ International Trade Union Confederation, 2012.

¹²¹ *Air Transport News*, 2012e.

¹²² International Labour Office (ILO), 2001b; International Labour Office (ILO), 2012.

In 2010 total recordable cases of injury and illness per 100 full-time workers in air transport in the United States was 8.1, a very high number compared to 4.0 in construction or 4.4 in manufacturing, second only to health-care workers.¹²³

The health of employees is directly linked to airline safety. Annex 6, Operation of Aircraft, of the Chicago Convention requires operators to establish rules limiting the flight time and flight duty periods for crew members. Furthermore, it calls for the operator to establish regulations to manage fatigue and to use Fatigue Risk Management Systems (FRMS).¹²⁴ The European Aviation Safety Agency (EASA) has proposed to amend the current EU rules introducing new limitations to the way crews can be scheduled. These rules are expected to be adopted in 2013.¹²⁵

Violence, whether caused by external intruders, customers or co-workers, can be a problem in civil aviation. Statistics on “air rage” are inconsistent but, for example, IATA recorded a 687 per cent increase in just two years, from 2007 to 2009.¹²⁶ The ICAO’s Tokyo Convention from 1963¹²⁷ covers the legal aspects of the “air rage” incidents and ICAO has developed model legislation for its member states. Airport check-in workers and other ground staff have experienced high levels of verbal abuse, even physical assault.¹²⁸

An ILO code of practice on workplace violence in services sectors was adopted in 2003. The code can be used to develop practical responses, promote processes of dialogue and cooperation among governments, employers, workers and their representatives. It can also give guidance in developing national laws, policies and programmes, as well as sectoral agreements or workplace policies.¹²⁹

Air traffic controllers have a highly demanding job requiring specific cognitive skills. They experience stress caused by operative aspects, such as time pressure, peaks of traffic and organizational structures, such as shift schedules and unfavourable working conditions. New flight control systems, with new methods of automation and communication, have changed job demands. Stress management strategies are often used to mitigate the impact of stress.¹³⁰

The Air Crew Trade Union of Almaty in Kazakhstan in 1998 filed a complaint to the ILO Committee of Experts on the Application of Conventions and Recommendations concerning 80 staff members, who had become disabled due to exposure to noise and vibrations at work.¹³¹

¹²³ *United States Bureau of Labor Statistics*, 2012.

¹²⁴ International Civil Aviation Organization, 2012d.

¹²⁵ *Air Transport News*, 2012f.

¹²⁶ Piera, A., 2012.

¹²⁷ Convention on Offences and Certain Other Acts Committed on Board Aircraft.

¹²⁸ Essenberg, B., 2003b.

¹²⁹ International Labour Office (ILO), 2003.

¹³⁰ Essenberg, B., 2003b.

¹³¹ *International Labour Organization*, 2012d.

5.3.3. Migrant workers

An increasing number of pilots and cabin crew are working outside their home country. Some countries with a small population, for example the United Arab Emirates, have large airlines but a very limited supply of employees, and therefore resort to hiring expatriates. Although often adequately remunerated, these migrant workers may experience discrimination and lack of social protection, including inadequate access to social security.

5.3.4. Social dialogue

In Europe, sectoral social dialogue in civil aviation has been in place since 2000. An agreement on mobile staff was concluded in 2000.¹³² At country level there were sector-specific boards functioning in seven countries in 2005–06. Sectoral bargaining exists in some European countries, but usually only setting a floor; bargaining is predominantly done at company level.¹³³

Some airlines (Air France–KLM, British Airways, easyJet) and service companies (LSG Skycheffs, Worldwide Flight Services, Aviapartners) have European Works Councils (EWCs).¹³⁴ The EU directive on EWCs applies to companies employing more than 1,000 workers in Europe.

The air transport industry is characterized by fragmented labour relations, where one airline usually has several separate collective agreements with different employee groups. This can be an important source of problems in the industry.

In the United States bargaining in civil aviation has, since 1936, been covered by the Railway Labor Act, to avoid disruptions in air traffic by using an extended mediation process. A strike by air traffic controllers in the United States was ended by President Reagan in 1981 by dismissing over 11,000 controllers. This encouraged companies to resist unions.¹³⁵

The Railway Labor Act stipulates separate bargaining and rules for each occupation. Attempts by the unions to coordinate bargaining have not been very successful.¹³⁶ There have been several initiatives in recent years for industry-level dialogue in the United States. Issues discussed included the need to share information and to build trust.¹³⁷

¹³² European Directive 2000/79/EC.

¹³³ European Foundation for the Improvement of Living and Working Conditions, 2010.

¹³⁴ *The Database on European Works Council Agreements*, 2012.; Tilling, C., 2012.

¹³⁵ Essenberg, B. 2001.

¹³⁶ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

¹³⁷ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

5.4. Strategies to improve workplaces

5.4.1. Employment relations in airlines

Bamber et al. classify airlines by, on one hand, their relationships with their employees and, on the other hand, by their relationships with their unions. Managers following the control-approach specify the goals and instruct their employees with directions to achieve these goals. The commitment approach tries to engage the employees so as to understand the goals and interests of the company and to act based on this understanding. It uses more teamwork and has more flexible job boundaries. A company may choose to fight the establishment of a union or undermine an existing union (avoid), sometimes by paying high wages and benefits. A second option is to accept (accommodate) the unions and have a contractual relationship with them. A third alternative is to establish a deeper partnership (partner) with the unions, either formally or informally. Figure 10 illustrates, where some major airlines are located in this analysis.

Figure 10. Airlines' relationships with their employees and unions

		Relationships with unions		
		Avoid	Accommodate	Partner
Relationship with employees	Control	<i>Ryanair</i> <i>Air Asia</i>	<i>Jetstar</i> US Airways Qantas British Airways Aer Lingus American	Lufthansa SAS
	Commitment	Delta (pre-1994) <i>JetBlue</i> <i>WestJet</i>	(Continental) ¹ <i>Virgin Blue</i> <i>(AirTran)</i> ² <i>EasyJet</i>	? <i>Southwest</i>

¹ Acquired by United Airlines in 2012. ² Acquired by Southwest in 2012.

Note: Selected airlines, low-cost carriers appear in italics.

Source: Bamber et al., 2009a, p.170.

Employment relations affect company performance. Good employment relations, as measured by a positive workplace culture, seem to result in good quality of service, high levels of labour and aircraft productivity, and contributing to a sustainable industry. Employees play a critical role in improving productivity of aircrafts and gates, and improving customer service and satisfaction.¹³⁸

¹³⁸ Bamber, G.J., Gittell, J.H., Kochan, T.A. and von Nordenflycht, A., 2009.

It has been argued, comparing Lufthansa, British Airways and Aer Lingus, that airlines in coordinated market economies are more likely to partner with their workforce for long-term competitiveness than airlines in liberal market economies.¹³⁹

Labor–management relationship

... The need to manage labor costs ... has placed increasing stress on the labor–management relationship. ... Airline labor–management relations promise to become even more complicated as the industry continues its transformation into a global market. ... labor laws are different around the world and labor practices can differ even within regions. ... labor–management tensions will persist ... as global alliances, global mergers and a freer flow of capital between and among airlines ... become more common. Resolving these tensions is perhaps the most critical challenge for airlines searching for sustained profitability, given that many of the efficiencies ... cannot be achieved without the participation of labor.¹⁴⁰

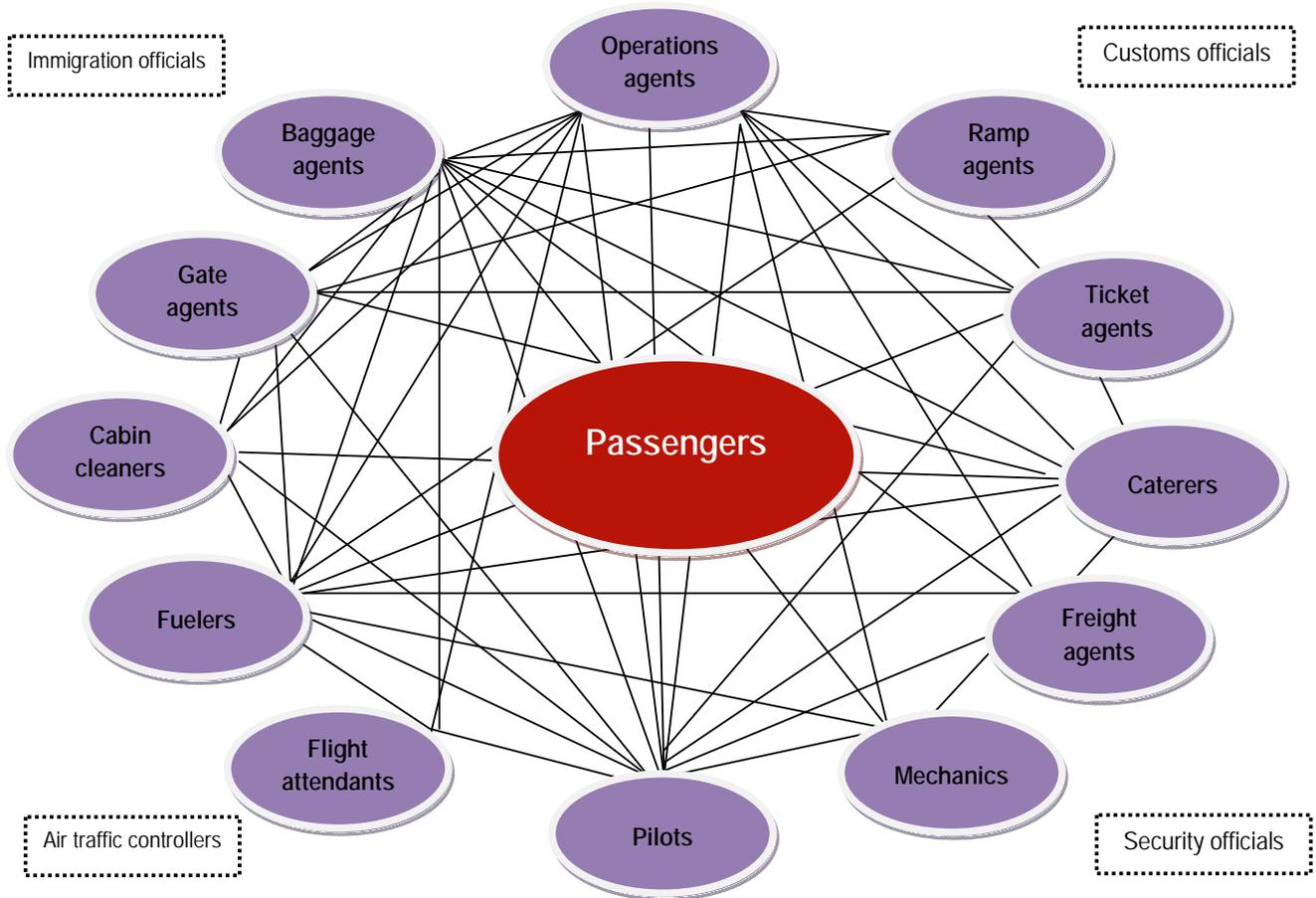
5.4.2. Work coordination at airports

A crucial area for development in the next few years is how to improve coordination between all the stakeholders in the effective and efficient functioning of airports in order to enhance the quality of service for passengers, luggage and freight. This would involve not only enhancing the relational coordination between all the agents shown in figure 11, but also ensuring that transport links to and from airports and air traffic control are optimized. Longer term, relations between airports serving the same city need to be better planned and coordinated.

¹³⁹ Turnbull, P., Blyton, P. and Harvey, G., 2004; Barry, M. and Nienhueser, W., 2010.

¹⁴⁰ Swelbar, W.S. and Belobaba, P.P., 2009.

Figure 11. Flight departures: A coordination challenge



Note: The author has added immigration, customs and security officials, as well as air traffic controllers, as they affect the airline operation or passenger experience.

Source: Gittell, J.H., 2008.

The need to improve collaboration at airports is widely recognized. Governmental organizations, such as the European Organisation for the Safety of Air Navigation (Eurocontrol),¹⁴¹ and industry organizations, including ACI, Civil Air Navigation Services Organization (CANSO)¹⁴² and IATA, are working together to improve collaborative decision making at airports.

5.4.3. Role of the ILO

Civil aviation is part of the transport sector, one of the 22 sectors covered by the Sectoral Activities Department.

Responding to the 9/11 events, the ILO held in October 2001 a think tank on civil aviation. This was followed by a tripartite meeting in January 2002, whose theme was changed to reflect 9/11 and a regional meeting for Latin America in 2003.

In the January 2002 meeting, the Employer spokesperson called for a triple-C approach: customer convenience, customer confidence and costs. The Worker

¹⁴¹ The European Organisation for the Safety of Air Navigation (EUROCONTROL), 2012.

¹⁴² Gittens, A., 2012

spokesperson responded with another triple-C approach: competent employees, confident employees, well-compensated employees. The employers welcomed a helpful regulatory framework and the workers urged the ILO to work with ICAO and member governments to enhance mobility and employment by harmonizing global standards.¹⁴³

ICAO is a UN specialized agency dealing with air transport. The strategic objectives of ICAO are to promote safety, security, environmental protection and sustainable air transport.¹⁴⁴ These objectives directly impact people employed in the industry. The ICAO–ILO Memorandum of Understanding dates from 1953 and the two organizations occasionally participate in each others' meetings. There has been discussion of the need to ensure that the work of the two organizations is carried out in a coherent manner.¹⁴⁵

ICAO holds its Sixth Air Transport Conference, from 18 to 22 March 2013 on how to improve the regulatory environment and promote sustainable air transport,¹⁴⁶ including market access, air carrier ownership and fair competition, issues also pertinent for ILO constituents.

¹⁴³ International Labour Office (ILO), 2002c.

¹⁴⁴ International Civil Aviation Organization, 2012a.

¹⁴⁵ International Labour Office (ILO), 2001c.

¹⁴⁶ International Civil Aviation Organization, 2012a.

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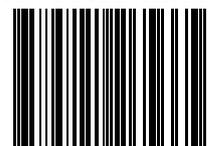
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