Chapter 2
The Geopolitics of Air Transport

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In an era of increasingly open markets and globalization, the international air transportation industry remains one of the most regulated and byzantine sectors of the world economy. The geopolitics of this regulatory regime can substantially manipulate and shape the geography of air transportation. According to Doganis (2010: 2), ‘any understanding of the economics of the industry must start with the regulatory framework which circumscribes and constrains airlines’ freedom of action’. One of the themes of this chapter is to articulate the fundamental tension that drives the geopolitics of air transport on the global stage. It will be argued that two regulatory regimes exist based on a liberal ‘open skies’ approach versus a more traditional, protectionist perspective, although the chapter will also stress that, in practice, this is not a simple twofold division.

Sovereignty and the 1919 Paris Convention

Aircraft have the unique ability to fly over and potentially disregard natural and cultural barriers, and so, air transportation is not just about the movement of passengers and cargo, it is also about geo-politics, regulation and power (Butler, 2001; Shaw and Sidaway, 2010). In this sense, nation-states have a vested interest in the development of the international air transportation industry, particularly regarding the state’s ability to control its borders. As a result, a dense framework of political, economic and regulatory institutions have evolved that fundamentally shape international air transportation (Duval and Macilree, 2011; Duval, 2008). In developing a ‘politics of mobility’ research agenda, Cresswell (2010) recently invoked several key questions regarding the geopolitics of material movement: Who moves furthest? Who moves fastest? Who moves most often? Although the answers to these questions are partly linked to the machinations of the global economy – where, not surprisingly, the New York–London route is one of the busiest air passenger markets in the world – they are also directly related to the regulatory apparatus that governs origin – destination flows at the national and global scale.

Much of this regulatory legacy can be traced back to the 1919 Paris convention which established that nation-states have sovereign rights to the air-space above their territory (in large part for national security reasons). Such an action elevated airline traffic to the level of a national resource that governments protected in the interests of national welfare. In the aftermath of World War One, many European nations clearly understood the national security imperative after a decade under the potential shadow of German Zeppelins (Butler, 2001). That said, it would not be until 1944 before the Chicago Convention established an over-arching and enduring framework for the regulation of the international air transportation industry.

It should be noted here that although the rest of this chapter will deal with the geopolitics of commercial aviation, both the Paris and Chicago Convention protocols also
helped shape concepts of aerial sovereignty as it related to military airspace, although this area of air transportation geography remains under-researched and under-theorized (Budd, 2009; Williams, 2011). Such a dearth of research in this area is unfortunate, because the vertical geopolitics of military air space can speak to the manner in which nation-states project power across space. Such a perspective might include a god’s eye view of targeting and surveillance from above (Graham, 2004) but also an analysis of how states ‘look upwards’ through the implementation of air defence practices (Williams, 2013).

In a post 9/11 world, where drones such as the much publicized Predator and Reaper Unmanned Aerial Vehicles (UAVs) utilized by the US military can strike terrorist targets anywhere in the world, geographers need to be more actively engaged in better understanding how these military spaces are contoured and manipulated. Williams (2010: 57) has gone so far as to suggest that we may be facing a crisis in aerial sovereignty. She argues that we are potentially ‘witnessing the chronic decline of the sanctity of aerial sovereignty, as strategies of security and securitization increasingly enacted by powerful states enable them to violate and render contingent sovereign airspace with continued impunity’. Adey et al. (2011: 183) echo this view when they suggest that ‘there is a pressing need to uncover and illuminate the critical geographies of the aerial view and the politics of verticality, especially when that view is utilized to target people, infrastructure and technologies for destruction’. Although it is clear that a geo-politics of military spaces is slowly emerging and crucially important, it is not the primary purpose of this chapter. With that said, we can now return to the primary narrative and discuss in more detail how the 1944 Chicago Conference outlined the essential geo-political parameters of commercial aviation.

The 1944 Chicago Conference and the ‘Freedoms of the Air’

As World War Two drew to a close, world leaders began to focus on establishing an institutional framework capable of nurturing international trade and commerce. To that end, the groundwork was laid for the establishment of the United Nations, the Bretton Woods Agreement, the International Monetary Fund, and the World Bank. In addition, there was a clear understanding that the fledgling aviation industry was directly linked to the facilitation of international trade and commerce. Consequently, pressure emerged to establish a coherent legal framework for the emerging international airline industry (Butler and Keller, 1994; Doganis, 2010; Kasper, 1988; de Murias, 1989).

In 1944, the Chicago Conference on International Civil Aviation was convened to develop an acceptable legal framework for the international operation of airlines. Two conflicting approaches emerged. The United States had emerged from World War Two with its territory largely unscathed and with a relatively well developed airline industry and thus advocated a free-trade, laissez-faire approach towards air transport. By contrast, the United Kingdom and most other European nations were more protectionist, in part because their civil airlines had been severely damaged in the war. Because these conflicting views could not be reconciled, the Chicago Convention could not come to a multilateral agreement on the three key issues of traffic rights, tariff control and capacity. However, the principal ‘freedoms of the air’ that underpin present-day air travel agreements and fundamentally influence the contemporary geography of air transportation were initially defined in Chicago and these included the following traffic rights:
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- **First Freedom**: the right of an airline of one country to fly over the territory of another country;
- **Second Freedom**: the right of an airline to stop in another country for refueling/maintenance reasons but not to pick-up or drop-off passengers or cargo;
- **Third Freedom**: the right of an airline to carry passengers or cargo from its own country to another country;
- **Fourth Freedom**: the right of an airline to carry back passengers or cargo from a foreign country to the country in which the airline is registered;
- **Fifth Freedom or ‘Beyond Rights’**: the right of an airline to carry passengers or cargo between two foreign countries provided the flight originates or terminates in the country in which the airline is registered (e.g., US-based United Airlines flying from Chicago to London and on to Frankfurt).

It should be noted that any city-pair market (e.g., New York–London) is essentially a combination of the third and fourth freedoms (i.e., the outbound and return flight segments) while the fifth freedom is highly controversial and less common not least because there are always three countries involved in the frequently protracted negotiations. Four additional ‘so-called’ freedoms have emerged since the Chicago Conference and although they rarely feature in any global regulatory agreements there are increasing signs that these ‘new’ freedoms may become less exceptional in the future – a point to which we shall return later in the chapter. These additional freedoms include:

- **Sixth Freedom**: the right of an airline to carry passengers or cargo between two countries via the country in which the airline is registered (e.g., Emirates Airlines carrying passengers between London and Singapore via its Dubai hub). In some ways, sixth freedom rights are simply a pair of third/fourth freedoms although they are invariably more difficult to negotiate since they involve three different nation-states.
- **Seventh Freedom**: the right of an airline to operate ‘stand alone’ service between two foreign countries entirely outside the territory of the home state of the registered airline (e.g., American Airlines operating a route exclusively between Mexico City and Rio de Janeiro). It should be noted that seventh freedom rights are more commonly exchanged for cargo-only services and are much less common for passenger services.
- **Eighth Freedom (or ‘consecutive’ cabotage rights)**: the right for an airline to pick up and set down passengers or freight between two domestic points in another country on a service that originates or terminates in the home country of the registered airline (e.g., Delta Airlines operating a route from Atlanta to Paris and then Marseilles).
- **Ninth Freedom (or ‘stand-alone’ cabotage)**: the right for an airline to fly between two domestic points in another country without continuing service to the home country of the registered airline (e.g., British Airways operating a route between Paris and Marseilles exclusively within France without a tie back to the United Kingdom).

The participants at the 1944 Chicago Conference were only able to agree on the mutual exchange of the relatively rudimentary first and second freedoms while no agreement was reached on the crucial third through fifth freedoms which essentially facilitated the exchange...
of ‘real’ commercial traffic rights between countries. Furthermore, the sixth through
ninth freedoms were neither discussed nor fully defined in the Chicago Convention. As a
result, no equivalent maritime ‘freedom of the seas’ agreement for aviation emerged out
of Chicago. Instead of regulating the international airline industry on a multilateral basis,
each country was left to negotiate generally restrictive nation-to-nation bilateral aviation
agreements through a series of international air service agreements. The shortcomings of
the Chicago Conference subsequently spawned over 2,500 bilateral aviation agreements
during the post-World War Two era that overly complicated and fundamentally dictated and
constrained the geography of air transportation (Butler and Keller, 1994).

It should also be noted that the International Civil Aviation Organization (ICAO) –
an inter-governmental United Nations agency – was established at Chicago to co-ordinate
technical and operational standards and practice worldwide. Over time, these standards
have been adopted by virtually all countries so, unlike the shipping sector, there are very
few ‘flags of convenience’ in air transportation. One reason for this is the fear of ICAO
sanctions so the end result is that ‘no major international airline can enjoy a competitive
advantage by operating to airworthiness standards below the generally acceptable level’
(Doganis, 2010: 28).

The Transition from Restrictive Bilaterals to ‘Open Skies’ Accords

In the aftermath of the Chicago Convention, it was inevitable that international air
transportation and the related traffic rights (or ‘freedoms of the air’) would be governed by a
network of bilateral air service agreements. Much of this was predicated on the recognition
at Chicago that each nation state had exclusive sovereignty over the airspace above its
territory but it was also linked to the requirement that each airline should have a nationality
by being registered in just one particular state (the so-called ‘nationality clause’). The
nationality or ownership clause ensured that aircraft from one nation-state had to obtain
special permission from another nation-state to operate an international flight segment and
this was usually codified through a bilateral air service agreement.

Underlying all bilateral aviation agreements has been the principle of reciprocity and the
fair and equal exchange of rights between countries although, in practice, this has frequently
proved problematic when the pair of countries involved are very different in size and with
host airlines of varied strengths. According to Kasper (1988), the 1946 US–UK bilateral
or Bermuda I agreement acted as the intellectual foundation for all subsequent bilaterals.
The Bermuda I agreement (so named because the US and UK governments negotiated the
bilateral in Bermuda) emerged as the ‘standard model for air service agreements between
many other countries’ (Wheatcroft, 1994: 19). Although each bilateral agreement tends to
vary with regard to content, the essential regulatory issues in Bermuda I were generally
covered by clauses dealing with the specification of routes, the designation of specific air
 carriers, ownership and control issues, capacity and tariff matters, and various confidential
‘memorandums [sic] of understandings’ between the two nation-states. Most bilaterals
severely constrained the range of cities served by the airline industry and controlled the
output or production of each airline through various capacity controls (e.g., number of
seats, flight frequencies).

The Bermuda I bilateral also approved the International Air Transportation Association
(IATA) as the primary institution through which international air fares would be mediated.
IATA was founded in Havana in 1945 as an airline lobby group that essentially acted as a counter-weight to the ICAO which largely represented government interests. According to Doganis (2010: 36), ‘there can be little doubt that IATA was effectively a suppliers cartel, whose object was to maximize its members’ profile by mutually fixing the prices at which they sold their services’. Through the bilateral framework, IATA was able to effectively set airline fares and cargo rates worldwide, thus, minimizing the possibility of price competition.

Although many bilateral agreements in the post-World War Two era reflected the protectionist attitudes of the prevailing national governments, the Bermuda I agreement was the first bilateral to accept the concept of fifth freedom rights or ‘beyond rights’ first enshrined in the Chicago Conference. Because of the large size and strength of the American market in 1946, the US was able to aggressively negotiate ‘beyond rights’ out of London to Amsterdam, Berlin, Budapest, Copenhagen, Frankfurt, Helsinki, Leningrad, Moscow, Munich, Oslo, Stockholm, and Vienna, plus Beirut, Calcutta, Delhi, Karachi, and many other cities. The generous granting of fifth freedom rights to US-designated carriers was one of the major issues that led the UK government to push for a re-negotiated bilateral that led to the 1977 Bermuda II Agreement. The UK achieved important gains in Bermuda II by increasing the number of US cities served from 9 to 14 including Atlanta, Dallas-Fort Worth, Houston, San Francisco, and Seattle while the US gave up many of its fifth freedom rights beyond the UK.

The Bermuda II agreement marked a watershed in US air transportation policy in the North Atlantic market. The 1946–1977 Bermuda era that had been marked by a series of restrictive bilateral negotiations came to a close and was replaced with a radically different ‘open skies’ approach in late 1977. In a 1978 Annual Report to Congress, the US Civil Aeronautics Board (CAB) stated that:

The renegotiated US–UK bilateral agreement is the LAST episode in the history of restrictive markets and triggered a major turning point in US international aviation policy. Bermuda 2 symbolizes the direction we are moving AWAY from. Rather, the US international policy is now based upon active competitive principles. (US CAB, 1978: 60–61) (Capitals added)

‘Open Skies’: A Reversal of US Aviation Policy

In 1978, the US government adopted a strategy formulated to ‘open-up’ international air service agreements to greater competition through a process of generalized deregulation. According to Dresner and Tretheway (1992: 172–173), most of these agreements allowed carriers ‘the freedom to set capacity without governmental interference, allowed additional routes between (and beyond) two signatories, promoted competitive rather than IATA price-setting, and strictly limited governmental authority over fare-setting’. The introduction of greater pricing freedom through more liberalized bilaterals increased the potential for the diversion of traffic from protectionist markets to more liberalized countries (Pustay, 1993). The US strategy of penetrating the North Atlantic market by establishing ‘beachhead’ agreements with key European countries (e.g., the 1978 Netherlands bilateral) led to other countries later renegotiating agreements with the US to maintain a competitive advantage (e.g., the 1996 German bilateral).
Kasper (1988: 89) noted that ‘by using the “carrot” of access to large, economically
attractive markets and the “stick” of diversion’, the US achieved significant liberalization
in some European markets. A few countries initially resisted the trend towards liberalization
e.g., France) but many countries embraced the ‘open skies’ approach (e.g., Austria,
Belgium, Czech Republic, Denmark, Finland, Iceland, Italy, Norway, and Sweden)
although most of these countries have small domestic markets. Because of the geographic
disparities in market size between the US and many other nation states, it became apparent
that a multilateral approach was needed and the focus of regulatory reform switched to the
European Union in the 1990s.

**European Liberalization**

During the late 1980s, the EU initiated discussions about establishing a more competitive
air transportation market to complement reform in other sectors of the economy relating
to trade and tariffs. Although the traditional picture of European aviation was one of
‘institutionalized cartelization and collusion’ (Button, 1996: 279), the privatization
of previously state-run British Airways coupled with the existence of a robust and less
regulated charter airline industry run by low-cost tour operators to sun-spot cities on the
Mediterranean rim offered an alternative perspective.

EU liberalization was gradually phased-in through a series of three aviation packages
that became effective in 1987, 1990 and 1993, respectively. By the early 1990s, the EU
had successfully removed most of the regulatory constraints acting on intra-European air
transport relating to fares, frequency of service, market entry and capacity constraints.
Since 1997, EU airlines have even been able to operate between points within an EU
country besides the country with which the airline is registered (i.e., the ninth freedom or
‘stand alone’ cabotage). By contrast, cabotage within the US is prohibited by law, meaning
it is illegal for a foreign carrier to operate a purely domestic route within America. Although
these EU reforms stimulated competition and partly explained the emergence of low-fare
carriers like easyJet and Ryanair, the EU had yet to fully reconcile the conflicting goals of
ensuring a competitive industry within Europe relative to the global competitive positions
of EU carriers. For example, some globally oriented EU carriers viewed intra-European
traffic as merely hub feed and considered the proliferation of competitors on domestic
routes as an impediment to their globalization strategies. Bernard Attali (ex-President of
Air France) considered EU liberalization as ‘a short-sighted approach focusing only on
intra-European competition’, which will ultimately weaken ‘the airlines of Europe in the
battle against their non-European counterparts’ (Graham, 1992: 249).

If the EU is now a fully unified and liberalized market similar, in many ways, to the
US domestic market, EU policy makers argued that external relations and the negotiation
of aviation bilaterals with non-EU member states like the US should fall under the
rubric of the European Commission (the executive body of the EU) and not individual
member states. In 2002, the European Court of Justice in a landmark decision asserted
that bilateral agreements between EU and non-EU countries were contrary to community
law and compromised deregulation in the EU’s single market (Aviation Week and Space
Technology, 2002). Bilateral agreements have traditionally mandated that participating
airlines be owned substantially by nationals of the home country – the so-called
‘nationality clause’. However, the then European Commission Vice President Loyola de
Palacio suggested that the ‘unlawful nationality clauses’ in bilateral accords are contrary
to the spirit and goals of the 1957 Treaty of Rome that first established the European Community. Such a ruling had significant implications for countries like the Netherlands who had already negotiated an aggressively ‘open skies’ agreement with the US in 1992 that provided considerable freedom on routes from the US to Amsterdam and beyond. Resolving these extra-territorial issues became crucial given the fundamental role that EU–North America and EU–Asia markets play in determining the overall health of the international air transportation industry. During the late 2000s, proposals for a Transatlantic Common Aviation Area (TCAA) began to emerge as the European Commission and the US Department of Transportation contemplated the possibility of an ‘open skies’ accord across the North Atlantic.

The EU–US ‘Open Skies’ Agreement: Traffic Rights and National Security

Although developing a Common Transport Policy had been one of the major goals of the Treaty of Rome, air transportation was excluded from this EU-wide policy platform because of the relatively small size of the airline industry in 1957. In the absence of a community-wide policy on air transportation in the EU, the US approach in dealing with EU nations had been to fill the policy vacuum by developing a ‘beggar-thy-neighbor’ strategy by initiating liberal air service agreements with individual EU member states like the Netherlands that forced others to follow suit in order to maintain market share (Button, 2009). All this changed in 2007 when the EU and the US agreed to a TCAA after nearly four years and 11 rounds of stop and start negotiations. Although the European Commission wanted to pursue a broad based liberalization strategy that included cabotage and ownership matters, the TCAA focused largely on traffic rights. Under the final agreement, any EU airline was allowed to fly from any EU city to any US city. Conversely, any US airline can now fly into any EU airport. All airlines now have fifth freedom ‘beyond rights’ and there are no restrictions on capacity, flight frequencies, or tariffs. According to Doganis (2010), the TCAA represented a major breakthrough because it created a vast ‘open skies’ market between most of Europe and the US, and it relaxed the conventional ‘nationality clause’ contained in most traditional bilaterals.

That said, the US was reluctant to relax the strict ownership and control rules for US airlines in the TCAA negotiations, in part because since the passage of the Civil Aeronautics Act of 1938, Congress has required that US citizens own or control at least 75 per cent of the voting interests of US airlines. According to the US General Accounting Office (2003: 2) the ownership and control restrictions were historically put in place for four primary reasons: ‘(1) protection of the then fledgling US airline industry, (2) regulation of international air service through bilateral agreements, (3) concern about allowing foreign aircraft access to US airspace, and (4) military reliance on civilian airlines to supplement airlift capacity’. Both the US Department of Transportation in 1991 and the Bush Administration in 2003 proposed amendments to relax the restrictions on foreign-owned voting stock of US airlines from 25 to 49 per cent but Congress did not embrace either of these proposals. The ICAO and the IATA, along with the major US network carriers, have also supported increases in foreign investment limits since it would likely allow US airlines greater access to global capital while also being consistent with EU and other bilateral partner foreign investment restrictions although little of this logic has gained much traction in Congress. Much of the contemporary logic for limiting foreign investment in US airlines rests squarely on issues of national security, the economy, and politics. The US Department of...
Defense (DOD) has traditionally opposed increasing foreign ownership, in part, because foreign investors might discourage the continued voluntary participation of US airlines in the Civil Reserve Air Fleet (CRAF) programme. Under the CRAF programme, US airlines provide DOD with supplemental airlift capacity in emergencies. In return, US carriers are granted preferred access to US government peacetime airlift contracts worth over $2 billion per year in revenue (Bolkcom, 2006; Cosmas et al., 2008). Increased foreign investment could also put jobs at risk since some jobs may be transferred to foreign workforces – a concern that deepened after 9/11 given the massive reductions in US carrier employment levels in the early 2000s. However, given the financial difficulties faced by many US carriers, additional investment may also stimulate domestic aviation by providing much needed sources of new capital. Additional concerns focused on the safety challenges of a post 9/11 era, since increased foreign investment could place additional burdens on the Federal Aviation Administration’s safety protocols regarding foreign aircraft that are transferred to a US registry. That said, thousands of planes belonging to foreign investors land and take off from US airports without incident and the planes hijacked on 9/11 all belonged to US airlines.

The end result is that the EU–US ‘open skies’ agreement is simply a first step, a compromise, short-term agreement that effectively opened the skies over the North Atlantic regarding traffic rights but fell short of a fully open market since it failed to address the crucial role of cabotage and the flexible movement of capital. In 2010, the EU and the US did agree to expand the 2007 agreement although no consensus was reached regarding the removal of the remaining barriers to foreign ownership and control of airlines. Under the terms of the second-stage agreement, the US granted EU carriers greater access to travel by American government employees which had been previously restricted under the ‘Fly America’ programme where officials traveling on behalf of the US government were required to fly on US airlines. The US also agreed to explore ways that a proposed American trading system for carbon emissions could be integrated with an existing EU system although no deadlines were discussed and the current US administration appears to have put these negotiations on the back-burner.

Meanwhile, the EU has decided to push ahead with its plan to make all flights into the EU subject to the emissions-trading system (ETS) which has now been passed into law. One problematic issue is that the ETS applies to flight miles generated outside EU airspace which European regulators argue is consistent with ICAO guidelines. The US and others have argued that this infringes on air space sovereignty and breaks the terms of the Chicago Convention. However, in late 2011 the European Court of Justice’s Advocate General ruled that the inclusion of international aviation in the ETS was compatible with the provisions and principles of international law. The impasse is troublesome given the substantive environmental impacts generated by air transportation and it is likely that the ICAO will have to play a more significant role in future negotiations.

All of this ignores an additional problem which is the significant gridlock faced by airport authorities on the ground given the projected trans-Atlantic growth rates as a result of the open skies agreement. Button (2009: 69) has persuasively argued that ‘the transatlantic open skies agreement does little to resolve the congestion issues at airports’ particularly regarding the way in which airport landing slots are allocated on either side of the Atlantic.
1 What About the Geopolitics of Airports?
2 The Political Economy of Airport Slot Allocations

While the demand for air travel has increased as markets deregulated, the capacity of airports to handle this demand has been expanding less rapidly resulting in severe congestion and delay problems in places like New York and London (Czerny et al., 2007; The Economist, 2011; Levine, 2009). According to Madas and Zografos (2010), over half of Europe’s 50 largest airports have already reached or are close to reaching their saturation points, and only a handful of airports plan major developments to expand capacity. Although building additional runways and airport terminals might remedy the acute gridlock in the North Atlantic and Asian markets in the long-term, Graham (2003: 120) has argued that ‘in many cases environmental, physical, or financial constraints have meant that in practice this has not been a feasible or desirable option’. The end result is that more attention has focused on developing short-term solutions with an emphasis placed on better demand management techniques including more appropriate regulatory mechanisms for allocating airport slots (Brueckner, 2008; Czerny et al., 2007; Debbage, 2000, 2002; Fukui, 2010; Levine, 2009; Madas and Zografos, 2008, 2010; Sieg, 2010).

Airport slots are usually defined as, in effect, permission to schedule a flight at a particular airport at a particular time, although approved slots are only required at designated capacity-constrained airports where the demand for runway and gate access exceeds the capacity of the airport. Currently, in all parts of the world except the US, the mechanism for allocating landing slots is voluntary industry self-regulation through the International Air Transport Association (IATA) – a powerful airline lobby group. IATA has identified 155 slot-constrained (or fully coordinated) airports that require formal procedures to allocate slots including 98 airports in Europe and 45 airports in the Asia-Pacific region. Many US airports are also capacity constrained but are not subject to the IATA Scheduling Committee rules (Graham, 2003).

Since 1946, IATA has developed various administrative procedures for allocating scarce airport capacity. As a growing number of airports became increasingly congested over time, IATA started to host twice yearly Schedule Co-ordination Conferences that administratively allocated landing slots at the capacity-constrained airports. The slot schedules were planned in six-monthly seasons and effectively ‘connected the dots’ of global airline networks. Although most allocations tend to be sorted out before a conference starts, they still play a vitally important role in allowing airlines and airport slot coordinators to meet face-to-face to resolve conflicts and swap slots with other airlines. Consequently, through a process of administrative rationing, IATA has been able to essentially outline the key spatial parameters of growth for international air transportation at these twice yearly summits.

One key principle established early on at the IATA slot conferences was the basic notion of grandfather rights where an airline that held and used a slot in the previous season has the right to operate it again. Part of the logic for this approach is it provides route network stability for incumbents that may have invested significant capital in developing routes. Others argue that grandfather rights are essentially anti-competitive, serving to advantage incumbents over would-be new entrants (Dempsey, 2001). For example, Deloitte Touche (2008) estimated that of the 9,562 slots available at Heathrow Airport during summer 2008, 9,462 (or 99 per cent) were claimed under grandfather rights. According to Gillen (2007: 52) ‘the IATA process protects the status quo, entrenches incumbents, is anti-competitive, and is generally blocking effective entry’.
In response to this criticism, IATA introduced a ‘use-it-or-lose-it’ rule to minimize slot hoarding by the dominant airlines where slots not used 80 per cent of the time over a prescribed time period are relinquished and put back into a pool to be reallocated to other carriers, including new entrants. It should be noted that the ‘use-it-or-lose-it’ rule was temporarily suspended after 11 September 2001 since so many airlines dropped routes because of the sudden downfall in traffic, but did not want to lose their historical slots. Within the EU, slot allocation comes under Regulation 95/93 which was introduced in 1993. Unlike the voluntary IATA system, the EU rules are legally binding and place a higher premium on transparency and impartiality. One important difference is that the European regulation mandated that the slot coordinator must be independent of all airlines at the airport. However, Regulation 95/93 also recognized the historical merit of grandfather rights that favoured incumbents, and many critics have argued the EU slot regulations did nothing more than codify the status-quo (Bass, 1994; Button et al., 1998; UK Civil Aviation Authority, 1998).

On the other side of the Atlantic, access to most US airports is based on a ‘first-come-first-served’ approach where landing slots are not subject to IATA rules, nor administered by an independent slot coordinator, but are subject only to normal air traffic control rules. Consequently, US carriers simply schedule flights to account for expected delays at the more congested airports. One historical exception to this approach is the High Density Rule (HDR) airports (i.e., Chicago O’Hare, JFK, La Guardia, and Washington Reagan). Given the heavy traffic at all four airports, a slot quota mechanism was introduced in 1968 at each of these high density airports to limit air traffic congestion and noise. Furthermore, since 1986, the FAA has allowed domestic slots at the HDR airports to be bought and sold for money, rather than merely being swapped for other slots as is the case in the ‘one-for-one’ trading system established by IATA. The US approach to slot trading is in stark contrast to EU Regulation 95/93 which allowed slots to be freely exchanged but was silent on the matter of price and ownership. However, this changed in 2008, when the European Commission announced that slots could be exchanged for monetary considerations although the level of trading varies by country. In the UK, a 1999 High Court ruling involving the alleged sale of slots at Heathrow Airport by Air UK to British Airways suggested that slots can be traded for money. Consequently, slot trading in the so-called ‘grey’ market has long been a recognized practice in the UK, even before the 2008 EU ruling. By contrast, Claus Ulrich, head of Germany’s slot coordination body FHKD recently indicated that slot trading rarely occurs in Germany although he saw a growing demand for trading (Airline Business, 2007).

In the United States, although the right to buy and sell slots at the HDR airports enhanced flexibility, new entrant airlines complained that it unfairly forced them to pay for slots that incumbents had gotten free under grandfather rules (Levine, 2009). Partly in response to these concerns, Congress enacted the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21) in 2000 that terminated slot restrictions for all the HDR airports except Reagan National by 2007. However, congestion and delays increased dramatically at the HDR airports. By 2008, these delays had become so chronic that ‘many peak-hour LaGuardia-Reagan National flights using jets are now scheduled for the same duration as the piston-engined propeller planes of 1953’ (Levine, 2009: 59). Consequently, the FAA ended up resurrecting the slot markets and placing temporary limitations on flight operations to prevent delays.

Developing more innovative slot policies that better manage scarce resources is critical given the profound ways in which airport infrastructural constraints can shape
One potential solution may germinate from the 2007 EU–US ‘open skies’ agreement that removed restrictions on routes rights across the North Atlantic (Button, 2009; Cohen et al., 2009)
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For all the regulatory innovation across the North Atlantic, much of the rest of the world still clings to relatively restrictive Bermuda I-type aviation bilaterals when negotiating air service agreements. Most of these sorts of aviation markets remain constrained in terms of: 1) the number of different airlines that can enter the market; 2) the number of flights and airline seats offered; and 3) the types of air-fares offered to consumers. According to Jomini et al. (2009), approximately 30 per cent of international traffic was governed by a restrictive, first-generation air service agreement in 2005. However, restrictive aviation markets are no longer the norm. The ICAO (2010) estimated that 32 per cent of all country-pairs with non-stop scheduled passenger air services and 57 per cent of the flight frequencies offered worldwide in 2009 operated through either a bilateral ‘open skies’ agreement or some form of liberalized regional/plurilateral arrangement (compared to just 7 per cent and 32 per cent, respectively, in 1995).

The rapid diffusion of liberalization is partly explained by the healthy increases in passenger traffic after liberalization. A 2006 study by InterVISTAS found that after liberalization, traffic growth typically averaged 12 to 35 per cent above its pre-liberalization levels. Additionally, the elevated levels of competition in liberalized markets tend to put downward pressure on air fares. According to IATA, since the passage of the EU–US ‘open skies’ accord in 2007, average discount economy fares across the North Atlantic have decreased by 8 per cent in comparison with America’s consumer price index.

For these reasons, both bilateral and multilateral liberalization has begun to spread to other parts of the world including EU bilateral liberalization with Morocco and Egypt and moves towards full domestic market liberalization in Australia, India, Thailand, and New Zealand. Some of the most notable examples include various plurilateral regional agreements in the Asia-Pacific region and the Middle East. In 2001, the US brokered the Multilateral Agreement on the Liberalization of International Air Transport (MALAT) with four other like-minded members of the Asia Pacific Economic Cooperation (APEC) that included Brunei, Chile, New Zealand, and Singapore. The MALAT was notable because it granted fifth freedom rights plus the free determination of capacity and tariffs. The overall goal was to broaden its membership but it has failed to attract many new or significant signatories. Other multilateral initiatives included the establishment of a regional ‘open skies’ agreement between the 10 members of the Association of South East Asian Nations (ASEAN) region. One challenge was reconciling the geopolitics generated by the significant variation in the size of the respective ASEAN member state economies. For example, Laos and Cambodia have very limited aviation markets when compared to the substantive traffic hubs in Brunei and Singapore. As a result, the timetable for reform was to be gradually phased in through 2015 with the goal of providing unrestricted access for airlines of an ASEAN member state to operate flights in the region. Perhaps one of the most embryonic initiatives is the efforts of the Gulf Cooperation Council (GCC) to liberalize air transportation in the Middle East. The Middle East has witnessed significant growth in the
aviation industry in recent years and several nations in the GCC have adopted unilateral open skies agreements (including Bahrain, Kuwait, and the United Arab Emirates). Many GCC countries have small home markets and have aggressively sought out major traffic flows through their hubs by negotiating sixth freedom rights with European and Asian countries. These so-called sixth freedom carriers include Emirates Airlines which has successfully attracted a significant amount of European–Asian traffic through its Dubai hub. One major stumbling block has been the largely protectionist stance taken by Saudi Arabia – the only GCC country with a substantive domestic market. However, all this changed in late 2011 when the Saudi Arabian General Civil Aviation Authority announced that it will be inviting tenders for foreign airline operators and investors to operate flights from Saudi airports. It remains unclear what precise direction this initiative will take, but the ongoing liberalization of one of the fastest growing aviation regions in the world is likely to transform the geopolitics of air transportation.

Conclusion

The transnational nature of air transportation means that any analysis of the geographies of commercial aviation must be inherently grounded in a fundamental understanding of the geopolitics of the global policy frameworks that shape the industry. Although international air transportation can readily transcend boundaries of language and culture, the movement of passengers and cargo by air are not perfectly fluid. Even in an era of rapid globalization, nation-state boundaries can frequently act as impediments to movement since different countries may embrace different regulatory regimes when governing their own national air space. According to Doganis (2010: 63), ‘an appreciation of the regulatory environment is fundamental for an understanding both of airline economics and of the reasons why airline operating and marketing decisions sometimes appear to be irrational or even contradictory’.

One theme stressed in this chapter is that the geopolitics of air transportation defies a simple categorization of liberal versus protectionist philosophies because the regulatory regime varies so dramatically from country to country. In the EU, carriers possess a full range of traffic and ownership rights although airports lack capacity and sufficient landing slots. By contrast, the US has a sizable domestic market but is unable to attract substantive foreign capital because of onerous ownership and control regulations. Throughout the rest of the world, the liberalization of aviation markets is spotty and significant parts of Africa and Asia continue to cling to protectionist policies. As the world, and especially the North Atlantic market begins to slowly climb out of the cyclical downturn of 2008/9, one key question is whether or not this accelerates or dampens the geopolitics of liberalization.

References


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