



The dynamics of airline alliances

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Abstract

This paper explains the dynamics of airline alliances. Using a system dynamic approach we shall first describe the driving forces behind the formation of alliances before going on to examine the inherent stability of alliances, both internally and externally. Understanding the dynamics of alliances can be useful in two ways. Outwardly, it can help in the thinking up of future scenarios which is something that is especially important to airlines that are looking for an appropriate alliance group but also for established groups looking for new members. Inwardly, such understanding is crucial as far as existing members of alliance groups are concerned when it comes to managing the alliance and achieving better performance. © 2002 Elsevier Science Ltd. All rights reserved.

Keywords: Airline alliances; Stability drivers; System dynamics

1. Introduction

Pioneered By KLM and Northwest Airlines, global airline alliances have now grouped together to form at least five main alliances. Have these groups achieved a certain equilibrium? In view of the following considerations the obvious answer to this must be ‘no’.

- If realised, British Airways’ plan to merge with KLM would not only give rise to the biggest airline in the world, in terms of revenues, but it would also shake the entire alliance configuration (see Fig. 1).
- The doubts surrounding Air France were cleared up when Sky Team and Delta Airlines were formed. Delta had thus abandoned its links with Swissair in the Atlantic Excellent group. Previously Singapore Airlines had left both those airlines to join up with Star Alliance.
- Swissair is currently finding that its strategies with the Qualiflyer group are not working. At the time of writing the company is considering finding a new partner or even joining another established group, which may well lead to the dissolution of the Qualiflyer group.
- After failed attempts to sustain the near merger alliance with KLM, Alitalia entered into talks with

certain other major airlines with the result that it now belongs to the Sky Team group.

- Meanwhile, moves towards consolidation in the US airline industry are facing tough resistance, both from legislative authorities and from employee unions. In view of market size, it is believed that what will mainly determine the number of major airline groupings will be the number of powerful American airlines.

It is vital to fully understand the underlying dynamics of these considerations since airline alliances have evolved from being a loose form of co-operation with each other to becoming one of the most important strategies to be competitive, especially in the medium and long-haul international market. What is now becoming widely accepted is the fact that the long-term survivability of airlines with global ambitions will be determined by their affiliation to alliance groups.

It is precisely that principle is explained in this article. Our descriptions of alliance dynamics will be divided into two parts: the driving forces behind airline alliance formation and the stability of airline alliances.

2. The methodology

The approach used to grasp the relations and dynamics existing between the various instigators of airline alliances is known as system dynamics. It is a

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Global airline alliance groups

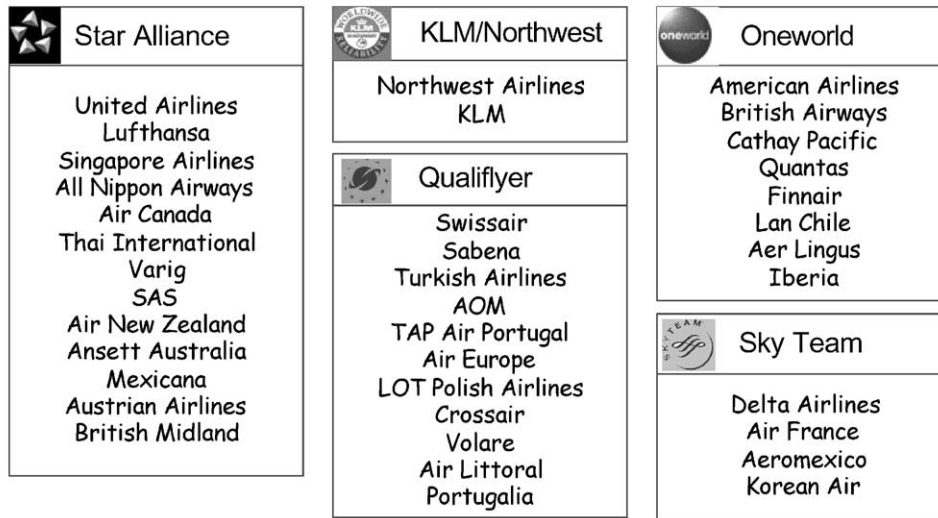


Fig. 1. The airline alliance groupings. Source: Airline Business, 2000.

The language of causal links and loops

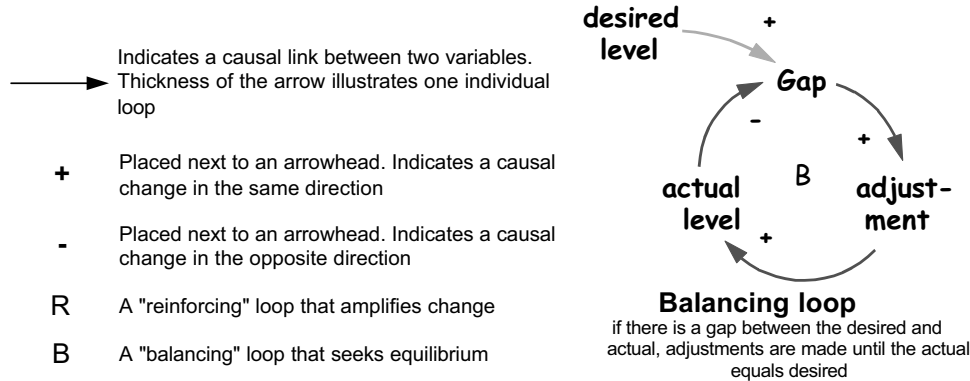


Fig. 2. The syntax of a causal loop diagram.

method that assesses the impact of different policies on the growth, stability and behaviour of complex dynamic systems, such as corporations. The tool chosen is that of the causal loop diagram which serves to illustrate the complexity of the behaviour of inter-related systems. In most cases, causal loop diagrams are inspired by System Dynamic Archetypes (Kim, 1995). The syntax of the causal loop diagram is given in Fig. 2.

3. The driving forces behind airline alliance formation

What is probably the most important instigator of change affecting all industries is globalisation, which is primarily driven by economic integration, stimulated by rapid technological developments (Porter, 1986; Bryan and Fraser, 1999). Globalisation directs international

trade by making foreign markets more accessible and by thus enhancing demand while also intensifying global competition.

3.1. Instability in the airline industry

The trend to globalise and thus to increase global competition creates turbulence because it makes all industries more vulnerable to changes in the globalising economy and more dependent on foreign regional economies. In any given industry turbulence is also caused by changes in other variables directly related to that specific industry.

Alliance formation can level off the effects of turbulence, especially for those operating within the global air travel market since collaborating with a number of global partners can balance turbulence by

diminishing dependency on one particular region, sort of resources and assets (Ernst and Halevy, 2000). This does not mean to say that dependency in one particular region will directly lead to business failure. However, when a company focuses solely on one region the chances of reaping the benefits from emerging markets elsewhere will be minimal and when the home market plunges into recession there will be no relieve.

3.2. The bases of uncertainty

The reinforcing loop of Fig. 3 demonstrates that market turbulence does greatly reduce economic certainty within the world’s market place while, in all these markets, turbulence can lead to economic situations that are hard to foresee. In addition, one minor disturbance in a local economy could easily unsettle the delicate balance of the global economy. Uncontrollable macro-economic processes—resulting in a fluctuating GDP—such as the dynamics between inflation, interest and currency rates further increases uncertainty. An important indication that the air transport market is highly influenced by macro-economic forces lies in the fact that the growth in the demand for air transport is proportional to GDP growth.

In trying to cope with uncertainty, industries see globalisation as a sensible way of safeguarding trade because globalisation eases access to markets. Enhanced access makes the shifting between weak and successful or emerging markets easier thus decreasing uncertainty so that in the end globalisation is tempered and the stability of the market environment is safeguarded.

Conversely, though, new market opportunities could augment the perceived need for globalisation as companies become encouraged to view this as the key to success. As globalisation increases, so too will turbulence and this will again make the business environment more uncertain.

3.3. The reaction of the airline industry

The process of ever-increasing globalisation described in the right-hand loop of Fig. 3 (loop R1) which is marked by turbulence and uncertainty typifies transition economies (Bryan and Fraser, 1999) where the focus of the economy shifts from being regional to being global. Apart from creating a more hostile and competitive market environment for airlines, the illustrated right-hand loop also generates two major opportunities. It means, firstly, that more new markets are able to emerge (loops R2 and B1) and, secondly, that customer demand will shift towards a demand for global seamless travel service (loop R3). In turn, this will increase opportunistic individual airline action because all airlines will want to gain advantages over other airlines. However, the motives for individual action are discouraged by two factors which facilitate airline alliances:

1. Restrictions on foreign ownership and control.
2. The nature of airline alliances.

3.3.1. Restrictions on foreign ownership and control

Though it is the airline industry that is largely responsible for propagating globalisation it remains, ironically, nationalistic in nature. In order to reach beyond one’s borders, the governments of any two countries have to establish bilateral agreements that will ultimately lead to a vast web of bilateral agreements on a world-wide scale.

Typical bilateral agreements will include consensus on issues such as (i) the carrier(s), in other words, the designated airlines, (ii) the routes flown, (iii) the types of traffic rights granted for the designated airlines, (iv) the frequency of flights and capacities and (v) tariffs. It is the first issue, that of the designated airlines that has become the main obstacle to true globalisation. If a designated airline company is to represent a country

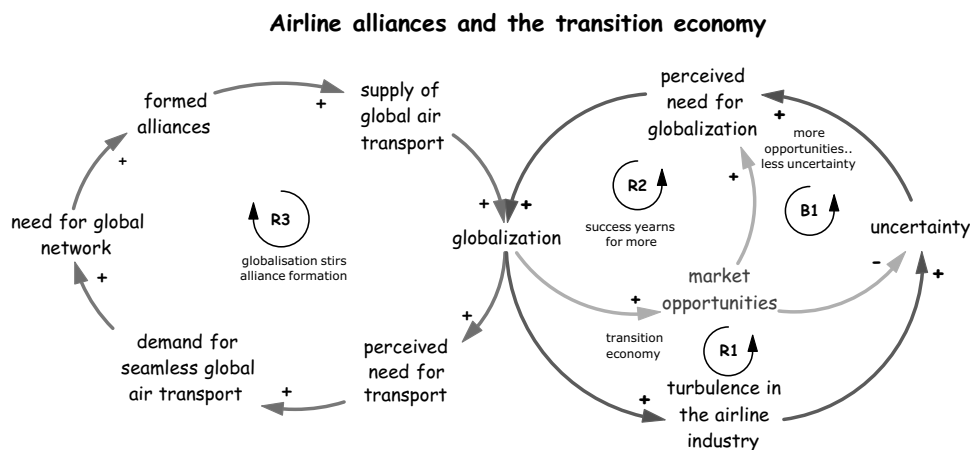


Fig. 3. The transition economy and airline alliances.

then the nationals of the country in question must have majority ownership and dominant managerial control over the airline.

On the whole, the foreign ownership of national carriers is limited. The US, for example, only allows foreign ownership of its airlines to rise to maximally 25%. Such limitations make cross-border mergers virtually impossible. The only way to achieve international world-wide expansion would be by forming alliances with other carriers and complimentary fifth freedom networks.

Another possible consequence of cross-border mergers is that bilateral agreements made separately with various governments between two merging companies may be lost. It was this uncharted area that played a part in the premature failure of the KLM–British Airways merger plan where the US proclaimed that the open-skies agreement it had with the Netherlands would not extend to the new company. Therefore, even if mergers were to be permitted, it would still be very difficult to create a world-wide network. Mergers with carriers that only have a domestic focus could be successful, though, since they are not hindered by bilateral factors.

Some effort has been made to ease the restrictive nature of the industry. So far the most important development in this direction has been deregulation in the US followed by liberalisation in Europe. Because of that EU countries now enjoy common aviation market in which bilateral agreements have been superseded by multilateral arrangements. The US has also revived its bilateral relations and introduced more liberal open-skies agreements. Furthermore, plans to establish even larger deregulated common aviation areas covering Europe and North America have been proposed (Doganis, 2001). However, as long as restrictions on ownership and control remain in place, alliance is likely to be the only way for airlines to globally expand their operations.

3.3.2. *The nature of airline alliances*

Despite the possible future weakening of regulatory constraints, it is presumed that alliances will still play an important part in the global market. Furthermore, they will not necessarily evolve in mergers when such regulatory constraints are weakened. Douma (2000) points out that already less than 5% of all alliances ultimately lead to mergers. There are two main reasons for this. Firstly, alliances are more flexible than mergers and flexibility is what is required within a turbulent and uncertain market. Secondly, the sheer size of the financial resources required to build an exclusive and world-wide network are enormous and—bearing in mind the volatile nature of past financial results—the returns on such investments remain uncertain.

It is clear from what has been mentioned above that the “transition economy” presented in Fig. 3 makes the air transport industry’s climate uncertain, turbulent and complex. The transition economy, which ultimately leads to a fully global economy, reflects constant, rapid and unpredictable change. In addition, due to the absence of entry barriers, the global economy will become highly competitive and will thus provide opportunities for all companies to enter new markets.

Airlines will therefore be forced to adopt organisational forms suited to coping with this highly competitive and volatile climate. A primary requirement of such an organisational form should be the increased competitive ability to survive in an environment that is characterised by fierce competition so that the benefits of entering new markets may be reaped and changing customer demand may be fulfilled. The answer presented by the airlines is to form global alliance groups because such an organisational form is flexible, has rapid growth potential and promises to provide a world-wide network within which member airlines can offer seamless global service.

However, the above-mentioned advantages of airlines cannot be benefited from if the dynamics of airline alliances are not understood. The stability of airline alliances will be discussed in the next section.

4. The stability drivers behind airline alliances

It is not only the intrinsic flexibility of any airline alliance that makes it subject to change but also the rapidly changing environment in which it is situated as well as the changing perceived benefits and competitive pressures which force all alliances to rethink their objectives many times during their existence and which, in turn, may lead to a redesigning or a dissolution of the alliance in question. Park and Cho (1997) wisely remarked that dissolution and redesign may not be directly equated with failure just as longevity and survival cannot be directly linked to success.

In managing any alliance that is to prove profitable and sustainable, it is important to comprehend the mechanisms that steer the dynamics of airline alliances. Those dynamic forces may be seen as stability and instability, the first of which can generate more synergy for the alliance, thus heightening the chance of success for all partners while the latter force will explain why an alliance needs to be dissolved or redesigned or why one of its partners decides to leave it. These forces can subsequently be subdivided into internal and external forces.

4.1. External stability drivers

External stability factors are those which act upon the alliance from the environment and can be divided as follows:

- Cyclic economy,
- Anti-trust legislation,
- Hub airport congestion.

4.1.1. Cyclic economy

Air travel growth is broadly proportional to prosperity growth (Boeing, 2000). Since leisure travel is becoming a more and more substantial factor in the demand for world-wide air travel (Organisation for Economic Cooperation and Development, OECD, 1997) this relation will become even stronger. At times of recession the world's airlines are put under considerable pressure while demand decreases and potential customers get more and more price sensitive thus forcing the airlines to take part in a price battle. GDP changes will alter the competitive battlefield of the airline industry and will thus be bound to change the fragile balance of alliance stability.

Service and price elasticity are two important variables affecting airline choice on the part of customers. During economic upturns customers will be more service sensitive and during economic downturns they will be more price sensitive. Taking this into account Gialloreto (1988) identified four carrier types relating to changes in the economic situation which he connected to two criteria. The first criterion was the desired segment into which the airline is to be slotted which relates mainly to the service provided by the airline. The second criterion revolves around the inherent relative cost associated with the operations of the given carrier which characterises the ability of airlines to compete on a price basis. Each airline type has certain market behaviour patterns.

However, these categories are not sufficient to, on their own, explain the need for an alliance. Two additional dimensions are therefore proposed which are: type of route network and geographical coverage.

The two main networks exploited are the hub–spoke network and the point to point network. At the same time, though, in terms of geographical coverage, the airlines may be said to serve global and/or regional–domestic markets.

The scope of types I and III carriers is primarily global while types II and IV may be characterised as niche players in the budget and leisure markets. However, changes in policy, reactions towards competitors and relative changes in the competitive balance can induce a carrier to move from one type to another (Table 1).

During a period of economic upturn the competitive environment will demand other qualities from airlines than during a period of economic downturn. In other words, each of the carrier types will have different aspects of vulnerability and success as the economic cycle is passed through.

A zone of vulnerability is a phase in an economic cycle when a particular airline suffers from decreased competitive advantage due to the characteristics of cost and service, while a zone of success is the opposite. The characteristics of the airline can be said to form an almost perfect match with the customer needs seen as an outcome of a particular zone in the economic cycle (Fig. 4).

Airline alliances primarily comprise type I and type III carriers within a global growth strategy. These types stand most chance of prospering during an economic upturn and of facing lessened competitive advantage during periods of economic downturn.

The stability of any alliance will depend on its ability to cope with economic downfall and to react in a chameleon-like way to changing competitive environments. An alliance has to be able to harvest and secure the benefits of increased economies of scale and scope during the upturn and peak periods of the economic cycle so that it is able to engage type II niche carriers in price battles during times of economic downfall.

4.1.2. Anti-trust legislation

In a harsh competitive environment, airline alliances are viewed as concentrations which is why they are

Table 1
Scheduled airline classification

Airline type	Cost–service level			Geo-coverage		Network		Examples
	High cost–high service level	Medium cost–differentiated service level	Low cost–low service level	Global	Regional–Domestic	Hub–spoke	Point to point	
I	✓			✓		✓		Scandinavian Airline Systems, British Airways
II			✓		✓		✓	Ryanair, Easyjet, Southwest
III		✓		✓		✓		KLM, Singapore Airlines, Air France
IV		✓			✓		✓	Crossair, Air Exel, American Eagle

Success and vulnerability in the economic cycle

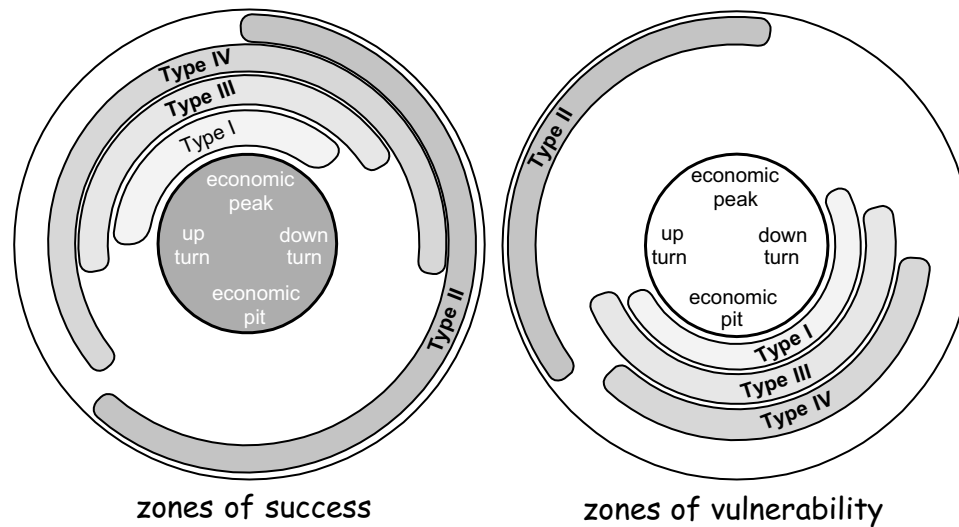


Fig. 4. Zones of success and the vulnerability of airlines.

scrutinised by anti-trust legislators whose views can have substantial effects on the stability of the alliance.

The European Commission, for example, oversees the troubles and opportunities accompanying airline alliances. It subscribes to the alleged consumer benefits of seamless service and travel between a larger number of city pairs, to reductions in travel times, to joint lounges and to the co-ordination of Frequent Flyer Programs thus resulting in more extensive FFPs. However, the European Commission also clearly sees anti-competitive effects arising from the formation of airline alliances. The Commission senses that there is an inclination towards deeper alliances no longer just involving simple agreements but rather amounting to the virtual merging of the activities of alliance members.

There are two anti-competitive effects and one anti-deregulation effect of airline alliance (Stragier, 1999). These anti-competitive effects are firstly those induced by the nature of the network of the alliance and, secondly, those derived from abusing market power. The anti-deregulation effects caused by airline alliances are strategies used for market protection.

The European Commission oversees the formation and development of airline alliances with great care. When it detects a source that might lead to market abuse it will act to protect consumer benefits. The measures taken to enforce the competition laws may include the followings (European Commission, 1997, 1998a, b):

- Allocating slots and airport facilities to competitors wishing to provide new services or expand existing services who cannot obtain the necessary slots if they simply comply with the procedures laid down in Council Regulations.

- Terminating links with other alliances if the market share of the alliance in question becomes dominant.

Such measures can limit the competitive advantages of the potential alliance or (temporarily) end the formation of the alliance. When the market shares of existing airline alliances are increased they will always be scrutinised for potential forms of market abuse. The European Commission can compel alliances to partly relinquish dominant markets to competitors thus restoring the competitive balance and weakening and therefore destabilising the strategic alliance.

Another factor relating to anti-trust legislation is the implementing of the above-mentioned measures in order to end the infringement alliance caused by the competition laws. In view of the rapid change reflected in the behaviour of markets the European Commission usually only implements these measures for 5 years at a time. The changing views of the European Commission can either stabilise or destabilise airline alliances depending on the future effect alliances are to have on competition.

Anti-trust pressures were, for example, seen in the plans of United Airlines to acquire US Airways, a plan that was eventually rejected due to concerns surrounding competition.

4.1.3. Airport congestion

Most airlines with a global focus have adopted a hub and spoke strategy in which alliances are formed to combine the hub and spoke networks of partners. Alliances (or mergers for that matter) will increase the benefits of hub and spoke networks. The tendency of alliances to allow airlines to expand the size of their hub and spoke networks is accompanied by two advantages

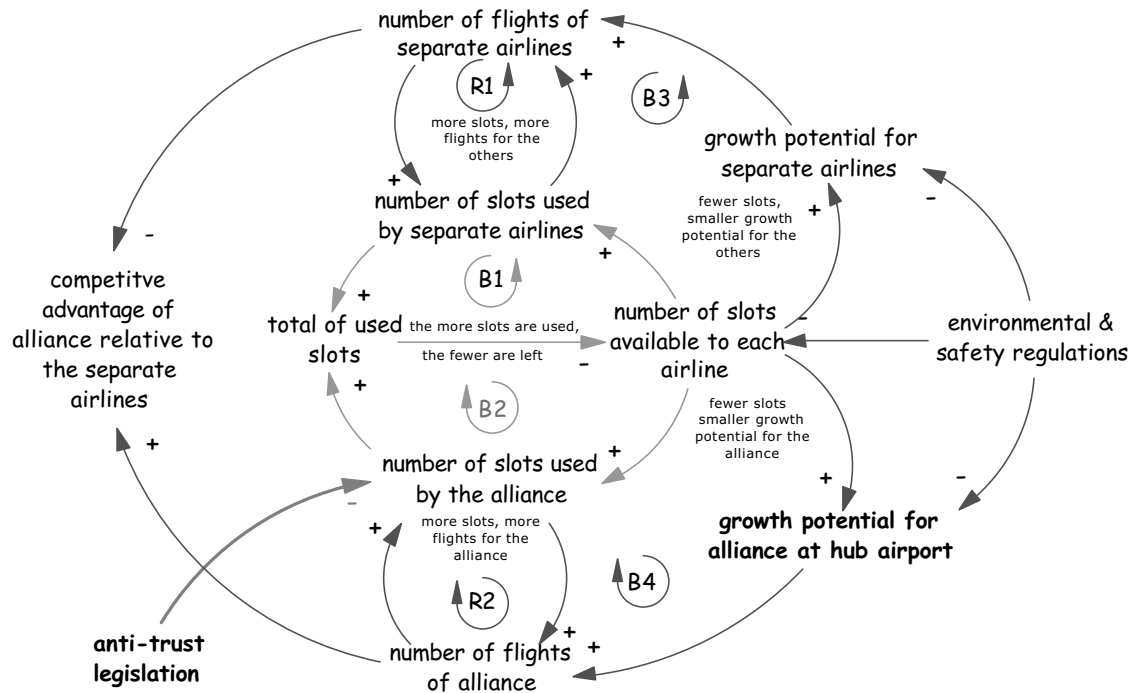


Fig. 5. The scarcity of slots at hub airports.

(Nero, 1999). In the first place, there will be less duplication of capital investment, in particular in the fixed costs associated with a new station, while, in the second place, combined hub and spoke networks will guarantee even higher traffic density resulting in higher load factors in the different market networks.

However, there are also some downsides to a hub and spoke strategy. For example, the concentrated wave activity emanating from hub and spoke strategies (Dennis, 2000) places increased demand on airport infrastructure and personnel to meet artificially created peak requirements.

Today a growing number of airports are becoming heavily congested because of the negative side-effects of the hub and spoke strategy but congestion can also be a consequence of the limiting of available slots due to environmental regulations (Ashley et al., 1995).

Congestion imposes two threats on the stability of any global alliance group. Firstly, since airports are congested and alliance groups have dominant positions at their—congested—hub airports allocating slots within the alliance will lead to slot shrinkage for non-allied airlines (Fig. 5, loop B3) thus putting pressure on their existence at that particular airport and further endangering the airport's already fragile competitive balance. The European Commission will view the dominant position of the alliance as an abuse of market power and it will force the alliance to give slots to the individual non-allied airlines operating at that particular airport thereby decreasing the competitive advantage that the alliance has over the separate airlines.

The second consequence of increased slot allocation for the alliance is obviously the decreased amount of slots left, which lowers the growth potential (Button et al., 1998) for the alliance at the airport so diminishing the competitive advantage in relation to the other major airline alliance groups (Fig. 5, loop B4). Growth potential is vital if the opportunities of the new market environment are to be reaped and competition is to continue at a global level (Hanlon, 1999).

Both anti-trust legislation and the diminishing growth potential will put pressure on the alliance and act to destabilise it. An example of an airline alliance having to be dissolved because of the destabilising effect of potential airport congestion caused by environmental regulations is that of the break up of the KLM–Alitalia Alliance (Pels, 2001). Milan's Malpensa airport was supposed to be one of the alliance's hubs and therefore crucial to the alliance but whether the Malpensa hub could be developed in the future remained uncertain because of environmental regulations. That uncertainty came to play a very important part in the destabilising of the alliance. In other words, if a hub is prevented from growing or if no substitute airport can function as a hub for the same market then the future of an alliance will remain uncertain.

4.2. Internal stability drivers

Airline alliance can also be (de)stabilised by factors such as the alliance's organisation and inter-organisational

relationships. The three most important categories of internal stability are:

1. Trust, mutual forbearance and multi-culturalism.
2. The level of network overlap of the members' networks and the number of partners in the alliance.
3. The learning situation created by an alliance.

4.2.1. *Trust, mutual forbearance and multi-culturalism*

Since airline alliances are forced to deal with incomplete contracts (Gomes-Cassares, 1996) between many partners drawn from different countries, trust, mutual forbearance and multi-culturalism become the most elementary bases of airline alliance stability. Together they form a reinforcing cycle. In stimulating mutual forbearance multi-cultural attitudes can start to prevail. Such pro-active attitudes will increase mutual understanding, thereby enlarging feelings of trust which will strengthen mutual forbearance, and so on.

All other internal stability factors can be reduced to these three basic stability aspects. Internal competition, for example, will not be detrimental to alliances or to redesign and it might even lead to increased innovation and therefore also to stability if the partners trust each other not to undertake individual action at the expense of other partners (Gomes-Cassares, 1996; Faulkner, 1995; Bernardino and Frankel, 1998).

This cycle has to be managed just as does the economic cycle. Investments have to be made when the alliance is doing well in order to survive conflict in harsh and turbulent times.

4.2.2. *The level of network overlap of the members' networks and the number of partners in the alliance*

Increasing the number of alliance partners (Gomes-Cassares, 1996) in the early stages of the alliance will increase the potential benefits for three main reasons. Firstly, the network of the alliance will cover a larger part of the world and therefore the partners will have access to more new markets. Secondly the alliance—and thus also the separate airlines—will come closer to the ideal of offering global seamless service and, thirdly, there will be more advantages to be achieved from economies of scope, scale and learning.

As the size of the alliance grows and alliances spread throughout the industry so the numbers of non-allied airlines will increase and the benefits for alliances—as perceived by the non-allied companies—will increase due to, for example, imitation motives and willingness to join the alliance will also increase.

Within the alliance, however, the increased size will be accompanied by diminishing additional value with each new partner because of increasing overlap in partners' networks and city duplication. Such duplication might either lead to internal competition (Faulkner, 1995) or it could, if partners decide to co-operate on those

particular routes, call for anti-trust legislators to resolve the anti-competitive behaviour caused by the co-operation. Both scenarios can destabilise the alliance and diminish the need (in the eyes of existing partners) for a potential new partner to join the alliance.

In addition to the diminishing added benefits arising from city pair duplication with each new partner Gomes-Cassares (1996) gives four secondary reasons for why returns diminish as group size increases:

- Increasing demands upon management,
- Rising risk of internal conflict,
- Loss of control for individual members,
- Greater difficulty of pursuing unified strategic goals.

The impact of the above-mentioned reasons for diminishing returns on the optimal number of alliance participants will depend on the size of the participating partners. The added value of each new partner will obviously relate to the size of the new partner's network and the optimal number of participating partners will subsequently be smaller in cases where there are just a few large participating partners than when many small airlines are involved in the alliance as is shown in Fig. 6.

On the other hand, an alliance that consists of many small partners will require more managerial control and can expect to have more internal conflict with individual members suffering increased loss of control. Ultimately, the added value of having a small partner in an alliance with many small participating partners will probably be more constrained by these three factors than by the duplication of city pairs. The optimum number of participants will thus be lower than when only the added network value determines the optimum number of participants. This contrasts sharply to situations where larger partners join alliances with a few large participants and it is largely the added value of the network that dictates what is the optimum participant level. This theory is supported by Air France's CEO, Jean-Cyril Spinetta (Baker, 2000) who mentioned in an interview with *Airline Business* that if there are too many partners in an alliance it is very difficult to offer global seamless service because of the managerial problems that then arise.

4.2.3. *The learning situation created by an alliance*

According to Faulkner (1996) and Barringer and Harrison (2000) one of the important competitive advantages of an alliance is the great learning capabilities it provides. Airline alliances should, in the first place, be learning situations since firms that share similar concerns, face similar problems and have similar dominant logic can more easily learn from each other (Dussauge et al., 2000). Inkpen (2000) also states that the greatest learning opportunities are to be found in situations where there is product overlap between the

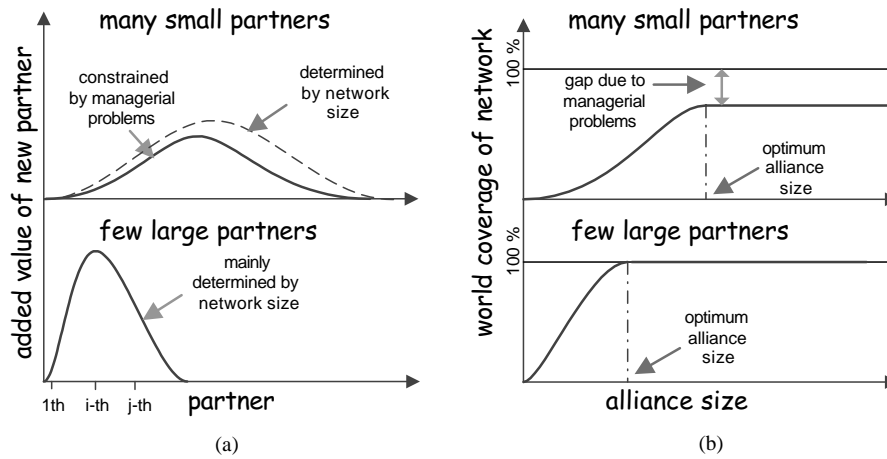


Fig. 6. (a) Added value and (b) optimum size in the airline alliance.

collaborative learning boosts alliance stability ...

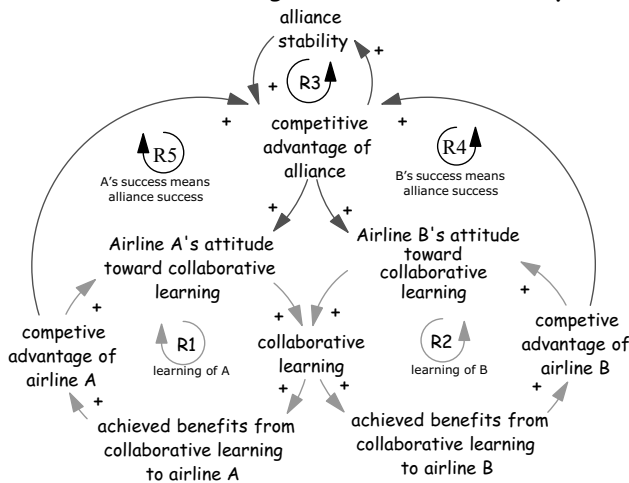


Fig. 7. Stability caused by collaborative learning.

partners. In addition to that Inkpen (2000) also argues that:

In a sense, the formal structure of an alliance creates a laboratory for learning. For the alliance partners, there is an opportunity to work together in a knowledge-sharing environment that can result in a win-win situation.

Successful collaborative learning has three stabilising effects. Firstly, collaborative learning will increase the competitive advantages of the alliance partners (loops R1 and R2 of Fig. 7) when the achieved benefits are sufficient for the alliance partners. This will enhance the competitive advantage of the airline alliance (loops R4 and R5), which will have a stabilising impact (loop R3) on the alliance and will increase the willingness to participate in collaborative learning. In turn this will tighten the partner relationship, thus

reaffirming the strategic fit because collaborative learning allows for constant feedback on the alliance's objectives in relation to the objectives of the separate partners.

It has also been said (Inkpen, 1998; Digeni, 2000; Faulkner, 1995) that collaborative learning can only take place if the partners trust each other. Collaborative learning will in its turn reinforce trust since the partners will have proved to be non-opportunistic and will have shown vulnerability towards the other partners. Reinforcing trust will also help to stabilise the alliance.

Finally, collaborative learning increases the dependency of partners upon each other. They will become used to the collaborative network and will rely on it to solve problems in a short time and to keep ahead of their rivals. The short lead-time of problem solving can only be realised through collaborative learning. If dependency grows then this implies that stability is increasing.

Nevertheless, collaborative learning is not without its risks (Inkpen, 1998). Disagreement about the perceived benefits of collaborative learning can, over the course of time, cause the perceived additional value of the alliance to shrink, especially for the partner who believes that he has benefited most from the alliance (Fig. 8, loops B1 and B2). This will decrease the perceived dependence of the partner since the bargaining power relative to the other partner will have increased. The partner will thus gain more options and more access to available partners. Viewed in this light, collaborative learning, originally seen as a core competence of the alliance, suddenly seems to become responsible for the erosion of the alliance.

Collaborative learning should be practised by airline alliances since it bonds partners and creates competitive advantages by decreasing problem solving lead times. However, the partners should be aware that learning

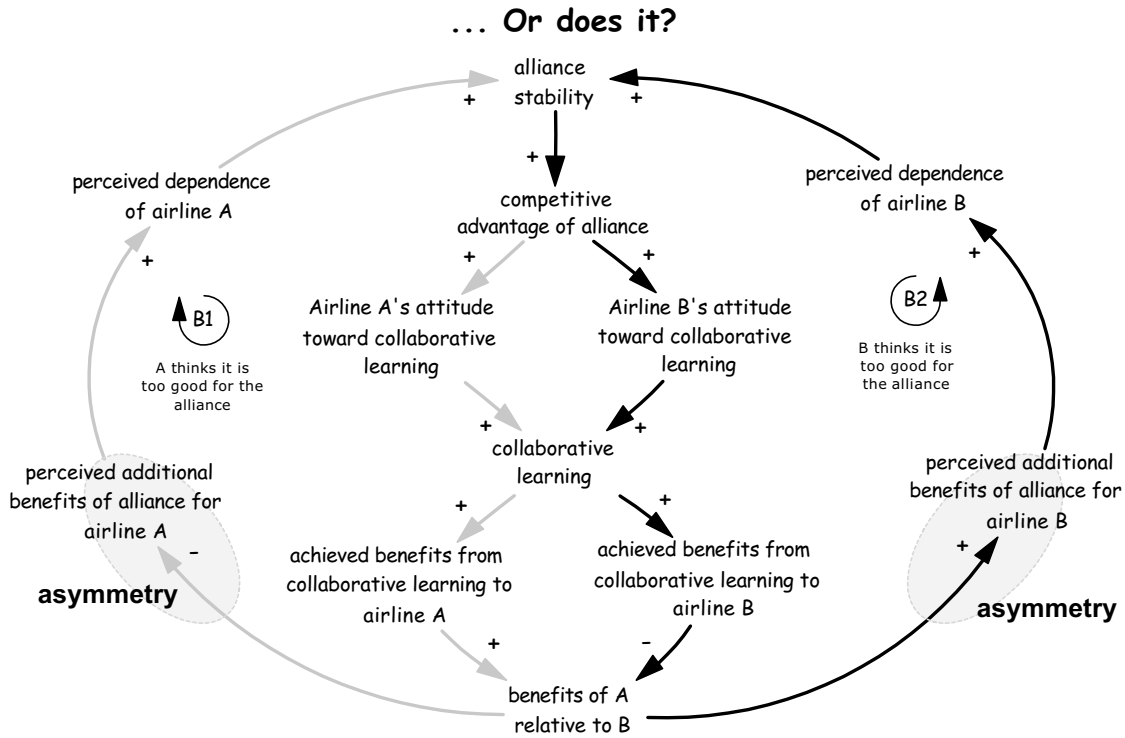


Fig. 8. Instability caused by collaborative learning.

‘asymmetry’ or disagreement can be destabilising. They therefore have to constantly review the benefits gained from collaborative learning in order to evaluate its effect on the separate partners and to sustain mutual dependency between partners.

5. Successful alone

Some airlines have managed to remain successful without forming alliances. In Europe, Ryanair and Easyjet are good examples of this and Southwest airways in the US. All these airlines share certain similar characteristics: all their route networks are limited to one region and to one domestic market and instead of having hub and spoke structures they provide direct services or what are termed point-to-point networks. This operational system has three important consequences. First of all, the restrictions attached to ownership and control do not apply to them and so they do not need to ally with other airlines. In the second place, since an EU common aviation market has been created bilateral relations between EU countries have been abandoned thus removing the pressure created when one particular airline company is designated to a given country. In the third place, such carriers are able to avoid congested airports and use secondary ones instead. Finally, adopting a low cost strategy makes such airlines less vulnerable within the economic cycle (see Table 1 and Fig. 4).

6. Discussion

The climate of airline alliances is uncertain, turbulent and complex. Assuming that there is a global economy scenario, the transition economy will ultimately lead us to a fully global economy exhibiting constant, rapid and unpredictable change. In addition, due to the sheer absence of entry barriers the global economy will become highly competitive thus providing opportunities for all companies to enter new markets.

Airlines have to find suitable organisational ways of coping with this highly competitive and volatile climate. A basic requirement of this organisational form should be to increase the competitive advantage of surviving in a highly competitive environment so that the benefits of entering new markets may be reaped. This can be achieved if the new organisational form is flexible and allows for rapid growth potential.

Global airline alliance groups do incorporate these two requirements thus implying that there is an increased competitive advantage for the member airlines and so this is presumed to be the answer to the newly shaped environment for airlines with global ambitions. Existing alliances have already proven to be very rewarding, both to the airlines (increasing profits) and to the consumers (better schedules and lower fares). Despite the proven success of alliances, results from the airline sector and particularly from other branches of industry, clearly show that alliances are rather unstable, though no less stable than mergers.

More fundamental knowledge on the impact that stability forces have on alliances and on the relationships between the various stability factors has to be obtained before conclusive statements can be made on the behaviour of global airline alliance groups. Before this can be achieved, systematic models have to be created and a good tool for this would be System Dynamics: the prime method when it comes to analysing complex systems.

Furthermore, if the future behaviour of global airline alliance groups is to be simulated, extensive knowledge on the complex behaviour of the environment—shaped by the external forces and facilitators of airline alliance formation—is also required.

If more sophisticated models are developed that can simulate the possible behaviour of global airline alliance groups relating to changes in the environment, alliance organisations or inter-organisational relationships then scenarios can be created that will assist the managers of alliances when it comes to increasing stability in a complex environment.

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