Airline alliances between Europe and South America as a result of globalization effects in the aviation business

Development, trends and adjustments between Lufthansa German Airlines and the Brazilian Varig in the Star Alliance network

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Abstract

Airline alliances between Europe and South America as a result of globalization effects in the aviation business: Development, trends and adjustments between Lufthansa German Airlines and the Brazilian Varig in the Star Alliance network.

There is a strong relation between globalization, the airline business and airline alliances. A special look at airline cooperations with European and South American participation helps to identify two global alliances, the “STAR Alliance” (Lufthansa German Airlines and Varig, ...) and “oneworld” (British Airways and Lan Chile). As a preferred example, the economical effects (due to alliance forming) on competitors, partners, suppliers and employee market have to be visualized by the use of the STAR Alliance Network and two of its members, Lufthansa and Varig.

The latest developments in the airline industry should be addressed also, since the globalization tendencies are going on in the 21 century.

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I. Introduction

Around three billion people in 24 countries have profit from the growing international trade in the last ten years, a worldbank study says. The countries achieved a 5% rate of (economic) growth in the nineties, the life expectancy and the education level increased. The basis of these developments is founded on a high infrastructure standard. The airline industry is one important part of public transportation and international trade.

This composition gives an overview about globalization trends in Brazil and Germany. The airline industry as catalysator for global business activities is the focus of attention. The major results for airlines, their employees, customer and landscape will be addressed exemplary.

I.1. Economical background of Brazil and Germany

Brazil is the fifth largest country in the world and the sixth most populous. It is larger than the continental United States and makes up half of South America. The Brazilian call it a country of contrast because it has so many extremes and very little in between. The country is large geographically, however, 90% of the people live on 10% of the land. Basically there are only two distinctive classes, the upper and the lower. Inflation is never stable, it is either drastically rising or falling.

Table 1: Economical background Brazil

Brazil	1996	1999	2000
People			
Population, total	161.5 million	168.0 million	170.1 million
Population growth (annual %)	1.3	1.3	1.3
Population density (people per sq. km)	19.1	19.9	20.1
Economy			
GNI, Atlas method (current US$)	698.0 billion	651.0 billion	606.8 billion
GNI per capita, Atlas method (current US$)	4,320.0	3,880.0	3,570.0
GDP (current $)	774.9 billion	529.4 billion	587.6 billion
GDP growth (annual %)	2.7	0.8	4.5
Inflation, GDP deflator (annual %)	17.4	4.3	7.1
Agriculture, value added (% of GDP)	8.3	8.6	8.9
INDUSTRY, VALUE ADDED (% OF GDP)	29.4	30.6	31.9
Services, etc., value added (% of GDP)	62.3	60.8	59.2
Exports of goods and services (% of GDP)	7.1	10.6	10.9
Imports of goods and services (% of GDP)	9.2	11.7	13.4
Technology and infrastructure			
Internet hosts (per 10,000 people)	4.8	18.5	39.0
Aircraft departures	483.600	678.200	..
Source: World Development Indicators database, July 2001			

Despite massive economic problems, Brazil is regarded as a potentially rich country with a strong industrial sector, large agricultural production and rich natural resources. With a diverse economic geography, a cyclical economic history and promising future, Brazil's economy presents a paradox of extreme potential contrasted against various barriers and risks. Also, because Brazil represents more than half of the GDP and population of South America, its economic health is profoundly consequential to other Latin American nations. Germany is Brazils biggest trade-partner in Europe and it's third largest in general.

Brazil has been called often a "rich country of poor people". With 10% of the population holding 90% of the wealth, Brazil has one of the most unequal distributions in the world. Currently 20% of the people live below the poverty line.

With the beginning of the 1990's, Brazil entered into an era of modern economic reform that current President Fernando Henrique Cardoso is continuing. The *Real Plan*, the new stabilization plan, has drastically reduced inflation rates and increased the prospects for sustained stability through a more balanced budget and strict monetary control targets. In July 1994, the Real, a new currency, was established, the fourth monetary change in 10 years. The government was able to reduce inflation from 50% a month to the current 2% a month. However, the dream of the real becoming a hard currency is far from reality. Even though inflation has dropped, prices are still unbelievably high.

The World Bank has been assisting Brazil in its development efforts since 1949. Since then it has financed over 240 projects, totaling some US $23 billion. Today, the overall governmental program of Brazil includes the financing of investment projects and the conduct of non-lending services, such as economic and sector studies and access to international experience plus technical analysis. The main objectives of this activities are:

- support for structural reforms that promote economic growth
- support for economic growth has included extensive analysis of public finances and public debt at the federal level and involvement in privatization at the state level
- support for fiscal improvements aimed at bringing budget deficits of all levels of Government under control
- poverty alleviation, includes projects in the areas of education, health, water and sanitation sector, and rural poverty
- support for protecting the environment (e.g. rain forest)

As Western Europe's richest and most populous nation, Germany remains a key member of the continent's economic, political, and defense organizations. The decline of the USSR and the end of the Cold War allowed for German unification in 1990. Since then Germany has expended considerable funds to bring eastern productivity and wages up to western standards. In January 1999, Germany and 10 other EU countries formed a common European currency, the Euro, which has become public currency in January 2002.

Germany possesses the world's third most technologically powerful economy after the US and Japan with total output equivalent to just over US $2 trillion in 1999 (in nominal terms). But structural market rigidities - including the substantial non-wage costs of hiring new workers - have made unemployment a long-term, not just a cyclical, problem. Germany's aging population, combined with high unemployment, has pushed social security outlays to a level exceeding contributions from workers. The modernization and integration of the eastern German economy remains a costly long-term problem, with annual transfers from western Germany amounting to roughly US $70 billion. Corporate restructuring and growing capital markets are transforming the German economy to meet the challenges of European economic integration and globalization in general.

Brazil is Germanys biggest trade-partner in South America, which has been promoted by the new established trading zone MERCOSUL, recently.

Table 2: Economical background Germany

Germany	1996	1999	2000
People			
Population, total	81.9 million	82.1 million	82.2 million
Population growth (annual %)	0.3	0.1	0.1
Population density (people per sq. km)	234.5	235.1	235.2
Economy			
GNI, Atlas method (current US$)	2.4 trillion	2.1 trillion	2.1 trillion
GNI per capita, Atlas method (current US$)	29,230.0	25,630.0	25,050.0
GDP (current $)	2.4 trillion	2.1 trillion	1.9 trillion
GDP growth (annual %)	0.8	1.5	3.0
Inflation, GDP deflator (annual %)	1.0	1.0	-0.6
Agriculture, value added (% of GDP)	1.2	1.1	..
Industry, value added (% of GDP)	29.4	28.4	..
Services, etc., value added (% of GDP)	69.3	70.6	..
Exports of goods and services (% of GDP)	25.3	29.2	..
Imports of goods and services (% of GDP)	24.2	28.1	..
Technology and infrastructure			
Internet hosts (per 10,000 people)	84.5	173.8	233.3
Aircraft departures	566.600	709.900	..
Source: World Development Indicators database, July 2001			

II.2. Description of Brazilian and German national airlines

Over 1,600 million passengers per year rely on the world's airlines. About 40% of the world's manufactured exports, in terms of value, are transported by air. Passenger and freight traffic is expected to grow by 5% annually over the next nine years, which is greater than the growth of global GDP. Air transport remains a dominant world industry.

Around 24 airline carriers are based in South America, but only about seven are global players based in Brazil or South America:

- Aerolineas, Argentina; national airline of Argentina with international service within South America and to Europe, North America, and Oceana.
- LanChile, Chile; Chile's national airline with international service within South America and to North America, Europe and the Pacific.
- TAM, Brazil; service within Brazil.
- Transbrasil, Brazil; carrier operates domestic and international flights within Brazil and to points within South America, Europe
- Varig, Brazil; Brazil's flag carrier, with international and domestic flights
- Vasp, Brazil; mainly domestic service.

Around 37 airlines are located in Europe, but only five major carriers have focused their business on the international / global market:

- Lufthansa, Germany; flag carrier, domestic and international business
- Scandinavian Airlines (SAS); domestic and international carrier, north European joint venture
- British Airways, UK; flag carrier with prior to international flights
- Air France, France; flag carrier with domestic and international flights
- KLM, Dutch; international flights only

Due to the main objective of this paper, globalization in the airline industry between Brazil and Germany, we take a special look at the international flag carrier Varig and Lufthansa.

Varig:

Incorporated May 7, 1927, VARIG Brazilian Airlines has established itself as Latin America's largest airline, in terms of both passenger and cargo service. It is among the 20 largest airlines in the world. During the last 70 years, Varig has accumulated approximately six million flight hours with an average of 435 daily flights and with a fleet of over 85 medium and wide-body jets.

Table 3: Facts and figures VARIG

VARIG (2000)				
Total revenue (US $):	3.0 billion		Revenue passenger miles:	15.8 billion
Annual passengers:	11 million		Daily departures:	453
Number of employees:	17,740		Countries served:	20
Number of destinations:	120		Fleet:	87 aircraft
Major hub airports: Rio de Janeiro, Sao Paulo				

Varig's pioneering spirit is intimately related to Brazil's commercial aviation development. Today, the Company maintains a route network covering 87 cities within Brazil. It has 43% of the domestic passenger market and almost half the Air Shuttle traffic in Brazil. For other countries in South America, VARIG offers daily flights to Argentina, Bolivia, Chile, Paraguay, Uruguay and Peru, with less frequent flights to Colombia and Venezuela, as well as 33 cities in 20 countries throughout America, Africa, Asia and Europe.

Safety is at the top of the company’s list of priorities. For this reason, the company boasts modern maintenance centers equipped with latest-generation instrumentation operated by highly qualified engineers and technicians. Varig's Rio de Janeiro aircraft maintenance complex is the largest in Latin America, other maintenance centers located in Sao Paulo and in Porto Alegre. Porto Alegre has the most complete aircraft maintenance complex in the Southern Hemisphere.

Varig also owns and operates the largest and most modern flight operations training Center in Latin America. It is responsible for training pilots, stewards and stewardesses, is located on Ilha do Governador, near Rio de Janeiro International Airport, and includes flight simulators used to train crew members.

Varig began working on diversification within airline transportation activities, with the creation of VARIG LOGÍSTICA S.A., taking the traditional cargo business to new dimensions of global door-to-door services using the transportation infrastructure as a whole. For VARIG the year 2000 represented a new departure point for broader horizons. Restructuring of the group under the umbrella of holding company Fundação Rubem Berta (FRB-Par Group) was a major stride forward in terms of corporate management. The aim was to grant the group's subsidiaries, among them VARIG, greater autonomy for their managerial bodies and executive vision focused on their business activities, which should be characterized by modernization and effectiveness.

The Company works with the prospect of boosting its performance on both domestic and international markets. The first step was consolidated by concession by governmental authorities to operate new frequencies in the German, American, French, Canadian and Spanish markets.

These markets show potential for continued improvement, as a consequence of the process of economic growth that exercises a multiplying effect on air traffic. The outlook is for an increase in the flow of passengers, hence justifying the introduction of new frequencies and routes.

Lufthansa:

Lufthansa is one of the ten largest airlines in the world. In terms of passenger numbers on international scheduled flights, it occupies second position in the world ranking. The Lufthansa story began in 1926, with its founding in Berlin. This chapter was brought to a close in 1945 with the end of the Second World War. Eight years later the new company, Lufthansa German Airlines, was founded in Cologne in 1953.

Table 4: Facts and figures Lufthansa

Lufthansa Passenger Airline (2000)				
Total revenue (US $):	11.2 billion		Revenue passenger miles:	53 billion
Annual passengers:	47 million		Daily departures:	1,349
Number of employees:	31,305		Countries served:	91
Number of destinations:	349		Fleet:	324 aircraft
Major hub airports: Frankfurt, Munich				

For an airline to be successful, it is essential that it have a global route network. The airline supplements its own network through cooperation with other major airlines. Besides the Star Alliance, Lufthansa has formed alliances with a number of partner airlines, ranging from globe-spanning alliances such as South African Airways or Air China - and European partnerships such as the German regional airline Eurowings, to regional feeder services into the Lufthansa hubs Frankfurt and Munich. Lufthansa for example has far reaching cooperation agreements with the Italian airlines Air Dolomiti, Air One and Spain's Spanair.

A special form of cooperation runs under the Team Lufthansa brand. Under this brand regional European airlines operate flights on domestic German and European routes with Lufthansa flight numbers. About half of the flights are regional services, the rest are feeder services to Frankfurt and Munich.

The airline's success is owed greatly to Lufthansa's technical expertise. Lufthansa's fleet is one of the youngest and most environment-friendly in the industry (average age: six years) and so the airline can offer its passengers the comfort and convenience of the most modern aircraft.

In addition to the most profitable Lufthansa Passenger Airline, there are other airline-related brands within the LH Group. The most important are Lufthansa Cargo (the world leading aircraft transportation company in its business field), Lufthansa Technique (one of the world leading aircraft maintenance company in its business field), Lufthansa Systems (airline IT provider) and Lufthansa Sky Chefs (one of the world leading airline caterer).

Lufthansa's value management rests on four pillars: Evolution into an aviation group, new technology, its fuel hedging policy and its ambitious eViation program. With new technology, its aim is to reduce distribution costs faster than competitors, utilize e-procurement and cement customer loyalty.

II. Globalization effects in the context of airline business

First of all, it is necessary to describe globalization in the economical context:

Although globalization is often attacked or lauded as a thing, it is in fact a process. In a more narrow sense, it represents an accelerating integration and interweaving of national economies through the growing flows of trade, investment, and capital across historical borders. More broadly, those flows include organizational skills, technology, ideas, information, entertainment, and popular culture. More recently, globalization also involves coordination of trade and fiscal and monetary policies to the point of currency unions.

The conjunction of intellectual, political, economical, and technological forces is creating a new economic and political environment.

The key forces are

- the end of the Cold War and the muting of ideological conflict
- a shift in thinking on the relationship between governments and markets that is promoting greater reliance on markets-specifically in the form of deregulation and privatization
- further trade liberalization and the growth of international trade
- foreign direct investment and the growth and interweaving of capital markets

- technological change
- regional integration

The movement toward a more open world economy is being fueled by a "change of mind" around the world. The ability of companies to respond and adapt to globalization through mergers and acquisitions is not the same across industries. Their ability to build efficiencies of scale and scope depends on the structure of the industry and the level of regulation in the industry. Public attitudes and political perceptions also play a role. Some mergers attract relatively little public attention, while others seem to attract much greater scrutiny irrespective of the competitiveness of the industry.

Alliances have the potential to be a powerful engine of growth across virtually every industry. This is already beginning to happen in telecommunications, logistics, information technology and airlines. Timothy Breene, Managing Partner of Capability Development for Andersen Consulting, UK, said that business alliances are not a new phenomenon, they have unparalleled strategic importance for companies today. "Alliances have become the prime vehicle for growth in industry because the trend is strongly correlated with globalization and the transition from the industrial to the e-economy. If vertical integration characterized the traditional industrial economy, the distinguishing feature of the e-economy is that traditional value chains are getting disintermediated," Breene said. Business alliances, he added, are used to extend the capability of a company in dealing with customers and managing growth.

II.1. Globalization and structural changes in the airline industry

In order to fully participate in and benefit from the new international economy, cities and communities around the world will need speedy and efficient access to the global marketplace. Delivering access will be the responsibility of airlines in the 21st century. Aviation is one of the enablers of globalization, but as an industry, it is a laggard in adapting to globalization owing to the peculiarities of its organization and the embedded weight of a half-century of national and international regulation. Deregulation, liberalization, globalization modern IT technologies must be seen in context. Each entailed the other and often one was not really possible without the other.

On a global basis, as in other industries, pressures for consolidation will continue to mount, driving toward economies of scope and scale, increased efficiency, and meeting customer needs. Airlines that can build the most effective networks are most likely to be successful in both lowering costs and delivering the type of service that the broader process of trade and economic integration will require. The airlines are gearing their strategies to business success. They are planning their capacities more accurately than before, keeping costs under tighter control and optimizing earnings, while boosting market share through coordinated worldwide service. In addition, "alliances give airlines the advantage of retaining their own identity while getting a global marketing reach," says Tim Goodyear, corporate communication, of the Geneva-based International Air Transport Association (IATA).

The IATA reckons that by 2010 the air transport industry's contribution to the world's workforce will rise from today's figure of 28 million jobs to 31 million. Over the same period its annual gross output of 1,400 billion dollars will grow to 1,800 billion dollars. As a result, a crucial trend for the air transport industry in the 21st century will not only be to enable "more" aviation. It will have to enable "better" aviation which reduces the environmental impact in terms of noise and pollution.

II.2. Obstacles in the way of airline globalization

The airline industry is behind many other industries in adjusting to the growing global flows. But the entire industry confronts a common agenda of issues driven by globalization, stated D. Yergin Cambridge (Energy Research Associates), R. Vietor (Harvard Business School) and P. Evans (Massachusetts Institute of Technology) in November 2000:

- regulatory adjustment and risk
- scale and ownership
- role of national identity and investment policy
- competitive pressures
- consolidation
- national security
- network economics

The regulatory structure that governs aviation arose for good reason: to meet a number of crucial objectives. The aims both domestically in the United States and on an international basis can be summarized as follows:

- to promote the expansion of the industry on an orderly, safe basis, avoiding costly and destabilizing boom-and-bust cycles
- to ensure high-quality service across a broad expanse
- to meet national objectives of security, identity, economic development, and industrial policy
- to provide a mechanism for cross-subsidization between high-density and lower-density routes, in order to meet the service objectives

Globalization is changing the framework through which the airline industry should be viewed from a primarily national perspective toward a more global perspective. Owing to regulatory and national considerations, it is through alliances that the aviation industry has so far responded to changing needs of customers and forces of globalization. The basic question is how to ensure that the airline industry does not further lag or constrain globalization but rather continues to play its key role in providing communities around the world with access to the global marketplace. A competitive airline industry, with sufficient scale and scope, will be vital to achieve the many benefits that can be gained from increased trade and economic integration. As a proxy for true mergers and acquisitions, most airlines have entered into a variety of commercial or alliance agreements to extend the scope of their operations. For the alliances, mergers and acquisitions are not musts, but they could become an instrument to enable consolidation. The major European carriers therefore favor unified European rules on ownership and regulation. The International Association of Latin American Air Transport has proposed a common regulatory framework that would reduce costs and help improve aircraft and crew utilization plus a joint air-traffic control authority, easing of foreign-ownership regulations and taking the first steps toward a common Latin American aviation market. This should be achieved by immediately easing requirements for the approval of code-share agreements and making traffic rights more flexible.

Most governments limit the level of foreign ownership and/or management on their nation's airlines. The United States is among the most restrictive: Foreign ownership of U.S. carriers, as measured in voting rights, cannot exceed 25%. In Singapore, it is 35%. In Germany, there are no longer limits for EU citizens, but other foreign ownership is limited to 49%.

The second obstacle to airline globalization is the regulatory system that still governs operating rights between nations. It dates from 1944 (Chicago Convention) and, in essence, works on an exception basis. All institutional flying is expressly prohibited except in those markets specifically agreed upon by the governments of the two countries on either end of each route. Because of regulatory and national considerations, it is through alliances that the aviation industry continues to respond to changing needs of customers and forces of globalization. While international consolidation may not be possible in the immediate future for a variety of reasons, including the bilateral structure of aviation agreements, consolidation with a country is possible and has effectively happened in Australia.

There's a certain irony in the fact that although aviation is so obviously global in nature, ownership laws and the structure that governs international aviation prevent carriers from buying and/or merging with airlines in other nations to offer integrated global service. So, airlines can neither buy their way in nor become truly global on their own. To surmount these seemingly intractable impediments, carriers are consolidating by linking up in strategic alliances that can include everything from schedule coordination to cooperative purchasing – to shared facilities – to reciprocal marketing programs.

To circumvent most of the limitations listed above, airlines have formed supra-national alliances that offer virtual single-carrier service and provide extensive consumer benefits.

II.3. Strategic airline alliances and airline cooperation

At present, four alliances, Star Alliance, OneWorld, Wings and Sky Team stand out as the core groups around which other airlines with strong regional networks. They form worldwide networks and can be described as global alliances.

Today, global alliances cover almost 70% of worldwide air transportation on offer. 52% of the European air-traffic is offered by global alliances. Star Alliance is the biggest alliance, followed by the American Airlines and British Airways led OneWorld, the Air France/Delta Sky Team and the North West/KLM Wings. But they remain fragile creations subject to competing attractions and economic forces. Over the years, several companies have switched from one alliance to another. Austrian Airlines, for example, moved from the Qualifier to the Star Alliance. Air France has years ago floated the idea of creating a Mediterranean alliance with Alitalia and Iberia. To make this three-way deal possible, Iberia would have to the leave the OneWorld Alliance. In general, the alliance forming in the airline business is a very dynamic process.

Now, alliances are reaching further, becoming multilateral and achieving global coverage by bringing in more regional partners. The Star partners themselves cooperate with smaller regional carriers in their respective domains. This enables the alliance to create a very dense network of air services across the earth. International airline competition is now being fought on a network-versus-network basis, rather than route-by-route.

Some alliances involve limited equity participation. Lufthansa for example, generally don't favor equity positions unless they create demonstrable commercial and strategic benefits. British Airways, on the other hand, owns for example pieces of Quantas and other carriers.

Whatever the ownership structure, the alliances' objective is to offer customers a global product – a "virtual" single-carrier service anywhere in the world.

Jürgen Weber, Chairman and Chief Executive Officer of Lufthansa German Airlines said that alliances are the only option for airlines because there are regulatory restrictions in many countries that prohibit acquisitions on a global scale. But for alliances to succeed you need the right partner and market complementarily - that is, the two airlines are not competing in the same market. Image, business philosophy, high safety standards and quality of service provided by partners also make a big difference.

As we saw before, there is a strong relation between globalization, the airline business and airline alliances. A special look at airline cooperation's with European and South American participation helps to identify two global alliances, the Star Alliance (Lufthansa German Airlines and Varig, ...) and OneWorld (British Airways and Lan Chile). As a preferred example, the global effects have to be visualized by the use of the Star Alliance Network and two of its members, Lufthansa and Varig.

Star Alliance:

In September 1993 VARIG and Lufthansa announce a marketing agreement including code sharing: The first VARIG and Lufthansa code-share flights begin June 1994.

In May 1997, Air Canada, Lufthansa, SAS, Thai Airways International and United Airlines launch the Star Alliance network. The sixth official member, in October 1997, was the Brazilian carrier Varig. In March 1999, Air New Zealand and Ansett

Australia Airways who today belong to the Air New Zealand Group and in October 1999 All Nippon Airways (Japan) joined the alliance. Singapore Airlines and the Austrian airline group (OS) are members since April 1 / March 26, British Midland and Mexico's Mexicana Airlines since July 1 2000. By bringing together twelve (up to date) airlines, a unique and easier travelling experience has been created. It offers flexibility and reduces unwanted hassle. Timetables have been harmonized to minimize inconvenience when connecting flights are needed.

Today, the Star Alliance is the largest airline network in the world who annually carry 296 million passengers (almost 5% of the world's population), through a fleet of 2,130 aircraft covering 815 destinations in 130 countries. In a Merrill Lynch Global Airline Benchmark, Star Alliance was outlined as the "front-runner in the airline industry's effort to build the most comprehensive global network". Now, with the basic framework of the alliance almost complete, the member carriers have agreed to accelerate the process for further cementing the level of cooperation between members.

Table 5: Facts and figures STAR Alliance

Star Alliance (2000)				
			Revenue passenger miles:	396.8 billion
Annual passengers:	317.55 million		Daily departures:	9,967
Number of employees:	322,857		Countries served:	129
Airports served:	894		Fleet:	2,299 aircraft

The Star Alliance seeks to meet customer expectations by combining status, privileges recognized world-wide, easier trips, better access to any corner of the world, comfortable environments and a marked concern for safety. It thus combines strengths to offer one of the greatest competitive advantages of all, since it gives the market a huge range of standardized services that allow passengers to travel faster at more competitive prices.

Although Star Alliance members work together on some cargo business, the alliance is passenger-driven and many cargo industry observers believe some of the members may strike a more extensive freight pact. But besides the passenger focused airline alliances, there are in fact also globalization trends in the air cargo business. The dominant air carrier in Brazil, Varig is considering stepping up its profile in the international shipping market by splitting its cargo department into a separate company, Varig Cargo Airlines. Lufthansa acts the same years ago and founded the Lufthansa Cargo Airline, which on the other hand leads the international New Global Cargo Group (LH, SQ, and SAS). Since mid of March 2002, New Global Cargo acts under the new branded name WOW.

If the move is adopted by Varig, it could give cargo operators the chance to make fleet decisions separate from the airline's far larger passenger business and to forge freight-centered alliances.

II.4. Benefits and risks for customer, employees and airlines

The concentration to just about four relevant airline alliances has major effects on the customer as well on the competitors, partners, employees and environment.

Yet as merger mania grows, the benefits to customers remain unclear. Will consolidation offer cheaper prices, increased choice and higher standards? Or does it portend a brave new world of global tourism dominated by a few mega-firms intent on maximizing profits while riding roughshod over smaller competitors and consumers? One trend is clear: as the travel industry goes global, developed and underdeveloped countries alike are embracing it as never before as an important facet of the economy. These relationships also benefit national and regional economies. To service the incremental traffic they generate. Alliance partners provide more jobs, buy more airplanes and other goods and services, pay more taxes, and generally increase economic activity everywhere they operate.

II.4.1. Benefits for the customer

Today all Star Alliance partners together offer customer's huge benefits around the world. The benefits for the customer - coordinated timetables, short waiting times and smooths transfers with no need to change terminals - are already well established. It is a fact of business life that you may need to change your schedule between destinations. When flying on a non-restricted ticket, you can use the ticket endorsement waiver, as it is called in the airline industry, to transfer to a more convenient flight on a Star Alliance member airline without having to return to the issuing desk. With about 7,200 flights every day (one every 12 seconds), there are plenty of alternatives to choose from. The partner airlines have also coordinated their frequent flyer programs and customer card systems. Status customers receive Gold (at Lufthansa Senator) and Silver (at Lufthansa Frequent Traveler) Cards, so they can enjoy the same level of service with all Star Alliance partners throughout the world such as priority at check-in in the event of waiting lists and use of the 500 partner lounges worldwide. Passengers can collect and redeem miles with all Star Alliance members, and can use these miles to gain Frequent Traveler or Senator status.

The customer benefits can be summarized as follows:

- Shorter total travel times. By sharing airport facilities and – where allowed by antitrust immunity – coordinating schedules, alliance partners can significantly reduce a trip's elapsed time.
- Offering through check-in and coordinated baggage and cargo handling
- Redeem awards as well as collect mileage on flights of all participants.

- Faster response times and dispute resolutions. Star Alliance partners, for example, not only can – but are required to – solve problems brought to them by customers on any participating carrier.
- More seamless travel. The jury may still be out on whether consumers want one-stop shopping for insurance, banking and other financial services, but in the airline business, the verdict is clear: The customers want single-carrier service – or at least the equivalent thereof. They also prefer that as much as possible be within one such entity.
- Sharing information about customers' meal and seat preferences
- Following consistent policies and procedures for such things as excess baggage and waitlist priorities
- World-wide recognition of status
- Priority reservation, standby and boarding for Star Alliance Gold members
- Priority baggage handling for Star Alliance Gold members, First and business class travelers

II.4.2. Benefits for employee / human resource development

The transformation of Lufthansa and other globally operated companies emphasized the corporate responsibility of creating employment and employability, which can be described as both local and global. This responsibility is global because companies grow globally and socially and not only nationally. However, the social responsibility is also local because the company's corporate culture has its roots in the country of origin.

To explain this thesis Mr. Sattelberger, ex executive personnel and human resource development Lufthansa, provided a very interesting evolution of organizational development - from the vertical structure before the 80s to becoming flatter with less management layers, to very horizontal with profit center orientation in the early 90s, and to present networks of virtual companies. The last structure is particularly efficient in transcending national borders and becoming global by nature. This could have both positive and negative effects on employment and other social concerns, although, as a rule, they are more productive, flexible and dynamic.

Today you can describe the process of restructuring of traditional companies through the outsourcing of non-core business and automatization of production and service processes on the one hand, and internationalization of production through globalization, networking alliances and franchising on the other. This coupling of the lean production and its outsourcing to other countries would create a dramatic effect in increasing productivity globally while at the same time reducing employment in one country and moving it, not necessarily in the same quantity, to another country where social standards could be much lower. However, the receiving countries could gain more income generating employment and as a result their social standards could be increased.

Human resource management in virtual organizations will be concerned mainly with establishing broad multi-skilling employability, the empowerment (mental and organizational) of the people; a counseling and coaching into, within and out of the organization; developing and maintaining flexible performance management systems and multi-optional management of mobility and careers.

The globalization process is forcing businesses to rethink their strategies. Intercultural communication skills assume an ever-larger role in global marketing and sales strategies. Consequently, language programs need to respond to these changes. Future business managers must acquire effective intercultural competence. The one world market has forced businesses to think global, act local, and integrate. Intercultural communication serves a vital role in that it can forestall miscommunication, prevent misunderstandings, and avert mistakes. As an example, it is important for foreign companies desiring to do business in Brazil to understand the historical impact of colonialism on Brazil. The legacy of colonialism has soured Brazilians. They have watched as their natural and human resources have been used to increase wealth in other nations, while their own nation has suffered from poverty, outrageous inflation, lack of technology, and lack of a manufacturing base.

VARIG's Human Resources policy is built around valuing and mastering knowledge oriented in the direction of achieving the Company's business objectives, in harmony with the search for personnel and professional achievement by its team of collaborators.

Taizo Nishimuro, President and Chief Executive Officer of Toshiba Corporation, Japan, said an alliance would only prevail if the company succeeds in persuading employees. "Achieving employee morale is the most difficult objective," he said; "You have to convince them about the need for an alliance".

II.4.3. Benefits for the airlines

Airlines participating in alliances are gaining traffic, operational efficiencies, and incremental earnings. Analysts estimate that the KLM-Northwest alliance, for example, adds US $250 million annually to the partners' collective bottom line.

Thanks to the alliance the airlines achieve higher revenues and reduce costs by exploiting synergy effects. Today, partners operate 71% of all LH flight numbers. The revenue per month for a global Star Alliance player due to Star operated flights is about US $40 Mio. Other activities range from joint use of ground facilities, such as check-in-counters, city offices and airport terminals. At Frankfurt, Copenhagen, Shanghai and Beijing airports, for example, the Star Alliance has its own check-in area with counters staffed by the partner airlines. At Zurich airport recently the first Star Alliance Lounge went into service. Other advantages accrue from joint purchasing of materials and equipment as well as procurement of common, future aircraft types.

In order to promote the alliance's development and gain the edge over competitors, the Star Alliance partners have installed an Alliance Management

Board with full-time senior executives and staff to manage all Star Alliance activities in an organization headed by a Star Alliance Chief Executive Officer (CEO) and Deputy CEO.

The headquarter is located in Frankfurt. The sole aim of the Star Alliance is to realize the vision of "seamless travel", in other words to increase customer benefits. In addition to those effects, which finally generate higher value for the airlines, there are activities to harmonize the business process and IT systems within the global partners to make global activities possible and effective. The most recent example is the joint reservation codes, which are being gradually implemented. StarNet is also helping to optimize handling. By linking member airlines' computer systems, it facilitates data exchange between Star Alliance partners without any need to change their IT systems. The system has been implemented in the second half of 2001 and will enable, for example, a system-wide use of etix® and global flight information of all STAR flights.

In general, IT is a significant cost driver for airlines and therefore a very important item for cost savings due to globalization. IT spending within Star Alliance ranges from 2% to 5% of the revenue. According to a study from the Boston Consulting Group, an IT integration of airlines like Lufthansa and SAS has a potential of 12% - 20% saving effects.

II.4.4. Benefits for landscape / people

In addition to the general economical benefits, which are shown best in Lufthansa and Germany / European economical performance, airline alliances and globalization may effect the landscape and people:

The Brazilian economy is roughly 54% services, industry 34.7% and agriculture/livestock 11.3%. With increasing globalization, Brazilian industry has shifted to international exporting. Industrialized goods, which were 71% of exports in 1989, jumped to 75% of exports in 1993.

If we have a special look at the infrastructural effects, the northeast of Brazil is a good example. For many years, the northeast portion of Brazil has been considered the black hole of the country. About 33% of the population in the northeast are in poverty, compared with 11% in the richer southeast. Poverty alleviation will require both broad-based growth (e.g. due to tourism) as well as direct actions on key sectors, such as education and health, and poverty groups.

Recently the region has been receiving great amounts of private investments and the state governments are doing their jobs to attract such investments to the region. The tourism industry is playing a major role. According to the WTO, in 1995, tourism generated US $563 billion worldwide, and among the emerging economies, Brazil’s revenue from tourism reached US $2,1 billion (ranked 11). The president of Abril, Roberto Civita, stated, that Brazil is going to show the world that the northeast is not only potential, but also reality. Tourism, with one of its key driver’s airline transportation, could become the northeast new economic cycle. In 1995, the region’s GDP of US $ 99 billion grew 9,8% while the country grew by 5.4%. In the past few years, 1017 new jobs, and another 100 thousands will surge in the wake of 250 ongoing industrial projects in the region.

The president of TAM Airlines, Rolim Amaro, stated that in 1994, 213 thousand tourists were brought to the northeast from other parts of Brazil. Amaro believes that after tremendous increase in 1995, the inflow of tourists only from the rich regions of southern Brazil has a potential of around one million travelers. Furthermore, the two major Brazilian airlines, VARIG and VASP, offer several international flights connecting the northeastern capitals to Europe, the US and Asia. Many other major world airlines like Air France, Lufthansa and Alitalia flies to the northeast as well. A long time believer in the region's potential was the ex-formula one pilot Nicki Lauda and ex CEO from Lauda Air, offered weekly flights from Europe to Porto Seguro (Bahia) since the late 1980s.

An other example for infrastructural benefits due to airline globalization are the new air cargo airports with an estimation of $450 million will be developed at Fortaleza, in the Northeast, and outside Sao Paulo, in the industrial center of the country. The Fortaleza project will lead the two hubs. The first runway will be opened by the end of 2002. The operating permission for the Fortaleza project was signed month ago with Ceara state authorities. The attraction of the hubs for international airlines from the northern hemisphere includes the possibility of limiting international flights to Fortaleza - the closest point in Brazil to Europe - then using domestic carriers to transfer cargo south.

III. Challenges and Opportunities of the global airline business

The globalization tendencies are going on in the 21-century. The latest developments in the airline industry should be addressed here. Especially serious external impacts, such as the terrorists attacks form the 11th of September have to be considered. Dramatically reduced booking numbers are the first visual effects. What does this mean for Lufthansa, Varig, STAR Alliance and the overall globalization tendencies in the aviation business?

III.1. Adjustments in economical crisis

The September 11, 2001 terrorist attacks in New York produced a totally new and unexpected component of political and economic uncertainty in the world and greatly deepened the global recession already underway since the beginning of 2001.

The International Air Transport association (IATA) estimated, that the whole airline industry lost up to 10 Mrd. US$ as a result of the terrorist attacks. The drastically reduced passenger traffic volume is still remarkable: From September 11, until beginning of November about 35 % less on the Atlantic route, 17 % less on the Asian routes and 10 % less within Europe. More than 120000 employees of the airline industry lost their job. September 11 had a fatal impact on every airline and especially to some of the already financially weak airlines: Ansett, Midway Airlines, Sabena and Swissair. One of the consequences of the crisis since

September 11 is that a number of airlines around the world find themselves in financial difficulty. Qantas announced in November it would reduce its workforce by 2,000 by the end of the year 2001. Singapore airlines are facing the most difficult conditions in its history. SriLankan Airlines is offering voluntary retirement to about 20 percent of its 3,800 staff. British Airways had to change their strategy with its focus on the north Atlantic route. Both Japan Airlines and All Nippon Airways have asked for financial assistance from the Japanese government.

Brazil's major airlines all face the problem of mounting debt-servicing obligations and falling sales. Already burdened by rising costs, Varig was forced to announce the cost cuts and lay off 10 percent of its 17,500-member work force 10 days after the Sept. 11 attacks. Both domestic and international route networks have been restructured and the fleet has been adjusted in order to cater for these changes and allow a higher degree of daily utilization of the remaining flight equipment. In order to adapt itself to the new reality of air transport the Company decided to end operations with 13 Boeing 737-200 narrow body aircraft, formerly employed on domestic routes, and reduce by 8% its older fleet of wide body aircraft mainly used for international flights, especially on the routes to North America. Thus, new, more modern and efficient Boeing 737-800 aircraft have been added to the fleet operating domestic routes while the latest generation Boeing 777 was acquired for international routes.

Lufthansa revised its profit forecast and deferred investment plans. The CEO, Jürgen Weber stated, that there was a daily lack of 30,000 passengers, more than US $50 Mio was missing weekly. After the devastating terrorist attack on the United States, the Executive and Supervisory Boards of Deutsche Lufthansa AG have been examining closely the consequences for global air traffic which are already apparent and those which are to be expected. In view of the current political uncertainty, it is not possible to make reliable forecasts of the travel behavior of customers or of the volume of cargo traffic. But it is only realistic to expect a drop in demand.

Against this background, the previous forecast of the Lufthansa operating result can no longer be upheld. At present LH is unable to make any reliable projections. Among the measures, which have already been approved, is a freeze on investments. Further measures include a reduction in capacity, a recruitment freeze and a thorough review of all expenditure and cost items within the Lufthansa Group.

It is a general opinion among airlines and their representative bodies that the September 11 attacks were targeted against government policies rather than against the air transport industry. Therefore governments must respond appropriately as long as market conditions cannot be restored to normal. The Association of Asia Pacific Airlines has called on the region's governments to aid the industry by providing relief from landing fees, terminal charges and taxes. They have also asked governments to help by promoting tourism and facilitating international air travel. While some carriers require specific government support, others believe that governments should try to offer solutions to meet the common problems encountered by all the different air operators.

A recovery from the huge economical and psychological loss is expected not before end of 2002. A key question is how the alliances will evolve after the events of September 11th. Although alliances offer the benefits of bigger networks, they create uncertainties for investment decisions, entail transaction costs, and impose other limitations that could be overcome by the full integration that is possible in other industries. Cooperation within alliances poses several challenges to managers: the size of the alliance, the need to intensify cooperation and the harmonization and standardization of common processes and the search for synergies to reduce costs. In times of crisis, however, alliances do not necessarily prevent stiff competition between partners.

III.2. Long term developments in the global airline industry

In conclusion, globalization will bring many challenges to Germany, Brazil and the world. The inescapable fact is that the trend toward globalization affects all countries. Whether the impact of globalization will be for better or for worse, whether it becomes a threat or an opportunity, will depend on how they respond to its challenges.

As earlier commented on, the air transport sector is highly sensitive to changes in the economic and political scenarios and quickly absorbs the effects thereof. Thus, the problems affecting operations reflect negatively in the flight operating profit and ultimately in net earnings posted in the balance sheet.

In the context of a changing world, a central question, as stated in chapter 2.1, is, whether aviation will play a leading and facilitating role in globalization or whether it will lag and constrain globalization because it has reached its regulatory-imposed limits. Certainly the great irony of the industry's current position is that, on the one hand, it is one of the fundaments of globalization and yet on the other, it is a laggard because of existing national and international policies.

The Open Skies initiative has marked an important turning point in the tightly constrained bilateral aviation system. These steps to liberalize the international market represent an effort to realign the interests of passengers, carriers, and countries to the pressures and opportunities created by globalization. It represents a recognition by a growing number of governments that it is not only necessary to accommodate new economic forces by removing restrictions existing within the framework of bilateral agreements but that there are great advantages to doing so. It also represents a recognition by a growing number of airlines that they can expand service and become more profitable even in the face of greater competition. The ability to link hubs across great distances and expand networks had the effect of greatly strengthening national carriers such as Varig and Lufthansa.

At present, it is through alliances that the airline industry has so far responded to the changing needs of customers and the forces of globalization. The emergence of alliances is industry's current response to globalization, given the particular regulatory constraints that it faces. Alliances present a blended image of individual company and global network. They are also an improvised response to national and international regulatory realities. However, alliances have significant limitations.

Looking at other industries, one must question whether alliances represent the ultimate evolution of the industry or only a layover to someplace else? Although alliances offer airlines bigger networks and increased efficiencies, they often create uncertainties for investment decisions, entail transaction costs, or impose other limitations that could be overcome by the kind of full integration-through mergers or acquisitions that is possible in other leading industries.

How will domestic and international policies evolve in future? The outcomes will play a major role in determining the degree to which alliances remain rooted in national companies and to what degree there will be increasing cross-equity ownership and cross-border consolidation of airlines. They will also play a role in determining the level of innovation and improvements in productivity that will take place throughout the industry. In adjusting to the opportunities and challenges posed by globalization, decision-makers will face trade-off between national identity and economic efficiency and between reliance on regulation and confidence in competition. They will face challenges in determining the degree to which antitrust policy should be coordinated among countries. They will also need to ensure that the policies that they adopt not only permit but encourage opportunities for innovation.

The final question is how to ensure that the airline continues to play its key role in providing communities in Brazil, Germany and around the world with access to the global marketplace. Like the steamship and railroads of past eras, a competitive airline industry, with sufficient scale and scope, will be vital to achieving the many benefits that can be gained from increased trade and economic integration.